

RMIT UNIVERSITY
SCHOOL OF ACCOUNTING AND LAW

**DOMESTIC TRANSFER PRICING IN SERVICES:
A VALUE CHAIN FRAMEWORK**

**Submitted in fulfillment of the requirements for the degree of
Doctor of Philosophy**

by

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ABSTRACT

The question of the management of the transfer process and transfer pricing is an important one for managers and academics alike (Colbert and Spicer, 1995). Yet, in general, our current knowledge on several aspects of transfer pricing process is limited. One question which arises in relation to transfer pricing in service organizations is whether there is an association between the transfer price and the internal customer's perception of value emanating from the transaction. An inappropriate transfer pricing system can give rise to a number of adverse effects which can include among other things, maldistribution of economic resources, negative motivation for reducing costs (Lesser, 1987), lack of goal congruence and inequitable performance evaluation (Cravens and Shearon, 1997).

The gap in the literature on transfer pricing in the service sector applies equally in the Australian setting. This is despite the significant and increasing contribution of the service sector to both GDP and employment.

The objective of this research is to explore the domestic transfer pricing practices of service organisations in Australia with the emphasis placed on examining whether, in internal transactions, the domestic transfer price had any influence on the value perceived by the internal buyer. Because the extant transfer pricing theories cannot explain the value perceived by the internal customer in internal exchange of goods and services, an exploratory research methodology is adopted and no assumptions are made about the relationship.

Data were gathered from survey responses from eighty service organisations and thirteen face-to-face interviews. Survey data were sought at two levels. Questions of a strategic nature were directed to corporate management while questions pertinent to transfer pricing and value were sought from the divisional management who are actually involved in such transfers. Exploratory factor analysis was used to analyze the data.

The findings indicate that cost-based transfer pricing was the most preferred method, and in internal transactions, and responsiveness of the internal supplier was the key factor for internal buyers. The research found that service organisations are external customer oriented and internal customer issues are secondary. The research results also demonstrate that no significant association exists between transfer pricing and internal customer perceived value.

The current research contributes to the transfer pricing literature by providing insights to locus of transfer pricing decisions, transfer pricing methods employed by service organizations in Australia, objectives of transfer pricing systems, conflicts arising during from the transfer pricing process and the role of transfer prices on the value perceived by internal customers. As a research topic, this study is pioneering as it integrates for the first time, the constructs of transfer price and value in internal transactions. Another unique feature of this research is that it was carried out in another important but under-researched context of service organisations.

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DECLARATION

I, Bulend Terzioglu, hereby certify that:

- a. except where due acknowledgement has been made, the work is mine alone;
- b. the work has not been submitted previously, in whole or in part, to qualify for any other academic award;
- c. the content of the thesis is the result of the work which has been carried out since the official commencement date of the research program
- d. Occasionally, I have asked a colleague of mine, Alan Dymond, a lecturer at James Cook University, to check the language of some selected sections which amounted to typically maximum a few pages at a time.
- e. I have used paid services of a Smartdocs to get some of the interviews transcribed.

Signed

CHAPTER 1 – INTRODUCTION

This chapter presents a background to the areas under investigation, explains why the researched topic is important and the expected contribution of the research outcomes to both academia and practitioners.

1.1. Overview of the research topic

The principal objective of the present research is to examine empirical relationships between transfer pricing (the prices at which goods and services are exchanged between divisions of the same company) and internal customer perceived value in service organisations in Australia. As recommended by Tang (1992), in consideration of the complexity and multi-dimensionality of the transfer pricing issue, a multi-disciplinary approach was adopted. The topic under investigation is concerned with accounting, marketing, services marketing and management and quality management literatures. In the accounting literature, Emmanuel and Mehafti (1994) begin to inquire about the impact of transfer prices on the value perceived by internal customers where value is defined as the overall assessment of the buyer of what is received and what is given (Zeithaml, 1988). Their curiosity is to find out if internal divisions treat each other as customers, and as a consequence, if internal transfer price charged by the supplying division does affect the perception of value of the buying division. It is believed that better internal customer satisfaction and provision of superior value to internal customers would eventually improve overall financial performance of the organisation (Heskett and Schlesinger, 1994; Schneider and Bowen, 1985). However, one of the key components of an internal transaction is the price charged between divisions for the services they perform. The effect, if any, of internal transfer price on internal buyer's perception of value has not been investigated to-date.

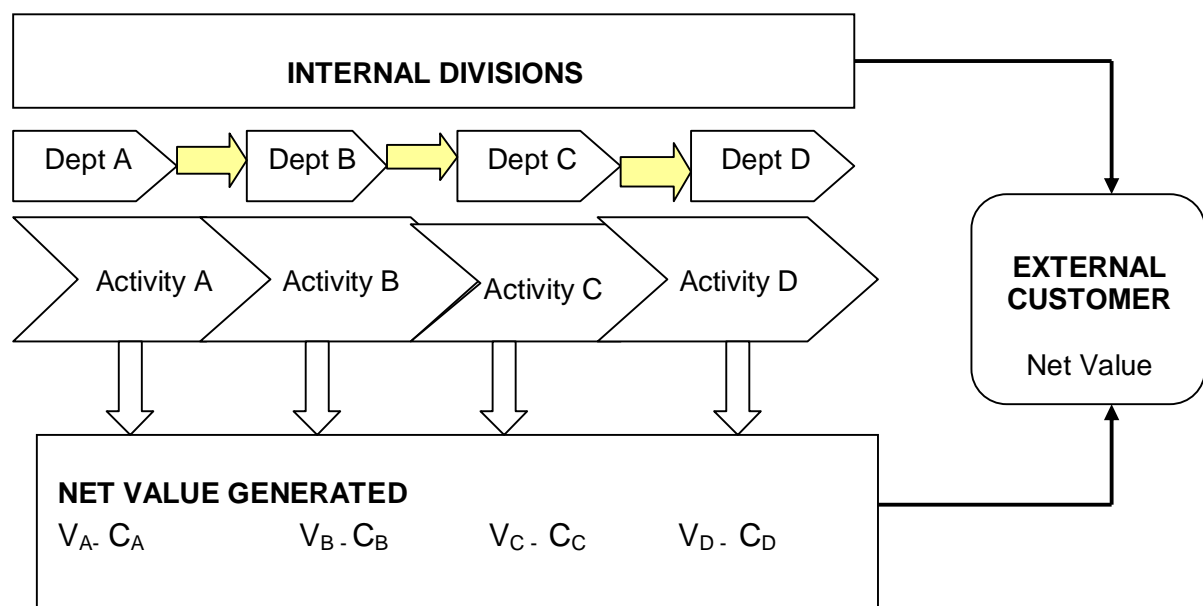
This research aims to examine this issue on service industries which also have been long ignored in the accounting literature. As discussed in more depth in the following paragraphs, services make up a growing proportion of developed economies' gross domestic product.

The current research is also the first empirical attempt to investigate the relationship between the domestic transfer price and internal customer perceived value. The rationale for the research is discussed in greater detail under Literature Review (Chapter 2). Today's business environment, and particularly the services landscape, faces more challenges than ever before. Rapid technological changes, out-sourcing, continued deregulation, the emergence of the global village, the increasingly competitive nature of most markets and rising consumer expectations present formidable challenges as well as opportunities (McColl-Kennedy, 2003; Lovelock, Patterson and Walker, 2001). The dynamic nature of the market place necessitates that organisations develop, possess and sustain some kind of competitive advantage either in the form of performing similar operations at a lower cost or differentiating themselves in ways valued by their customers (Porter, 1985; Day and Wensley, 1988) or both (Thwaites, Walley and Foots, 1996; Baden-Fuller and Stopford, 1994; D'Aveni, 1994).

While there seems to be agreement on the importance of achieving and sustaining competitive advantage (Porter, 1985; Schnaars, 1991), views differ as to its sources. Hay and Williamson (1991) claim that the concept of competitive advantage is a deceptively simple idea of assessing a company's capabilities and market position by how they provide advantage relative to competitors. A firm's competitive advantage stems from its own ability to create and sustain value for its buyers that exceeds the firm's cost of creating it (Porter, 1985; Ravald and Gronroos, 1996; Woodruff, 1997; Parasuraman, 1997), from the quality and commitment of the labour force (Lovelock and Yip, 1996; Berry, 1981), through superior resources, superior skills and superior controls (Ravald and Gronroos, 1996; Day and Wensley, 1988). Heskett, Sasser and Schlesinger (1997) and McCarthy (1997) report that there is association between the sound internal structures and processes and satisfaction of external customers.

The flow of internal activities and the value creation during the internal exchange of services are illustrated in Figure 1.1. The aggregate net value obtained at the end of the activity chain presumably affects the value that the final (external) customer will receive. The domestic transfer price is considered a component of the total cost incurred by the internal buyer.

Figure 1.1.
The value creation process



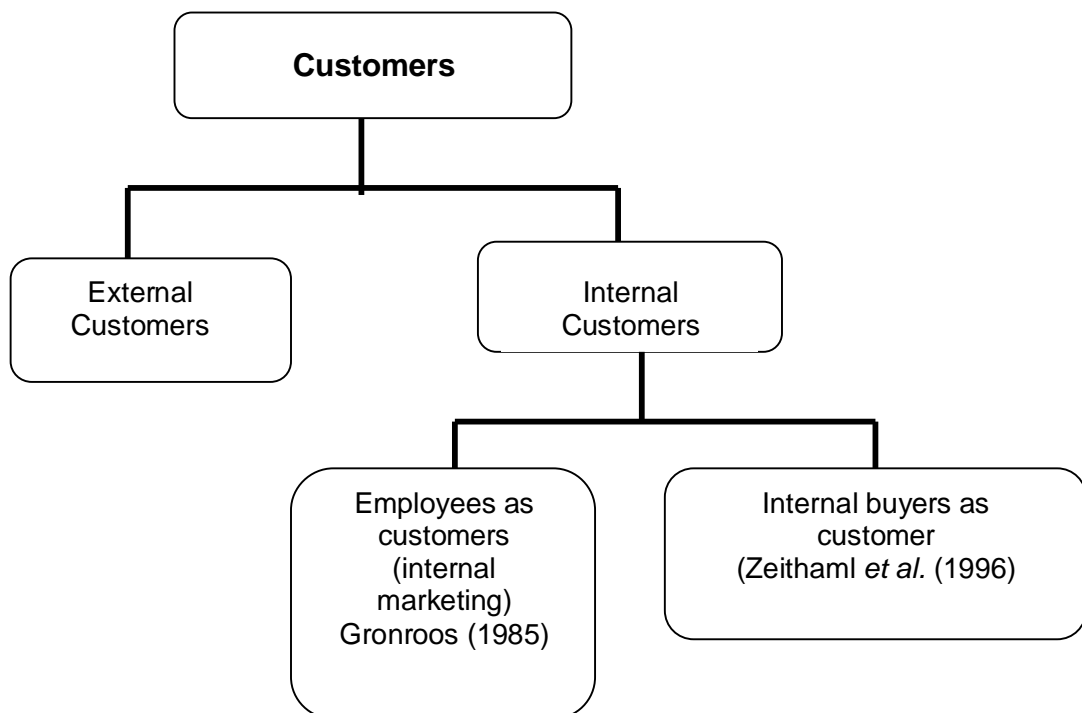
C: Cost V: Value

Figure 1.1 follows Porter's (1980, 1985) model where all activities are interconnected and each activity adds value before passing the intermediate product/service to the next division. In this model, net value resulting from each activity represents the difference between the cost of performing a particular activity and the benefits received by the buying division.

1.2. Two types of customers

As depicted in Figure 1.2, the term “customer” falls into two categories: external customer and internal customer. External customer refers to the consumer or organisation that is not affiliated to the firm and who is the end user of a firm's products or services while internal customer refers to employees or departments that directly interact with customers and sell, service, maintain, or troubleshoot for other departments or functions in the company (Zeithaml and Bitner, 2003). That is to say internal customer is the division within the firm that receives the work of another and then adds its contribution to the product or service before passing it on to the next division. Although several researchers distinguish between these two types of customers, Gummesson (1987) believes that there should be no such distinction between external and internal customers because everybody in an organisation is both an internal customer and supplier of goods or services to other internal customers.

Figure 1.2
Types of customers



1.2.1. External customers

For the reason that they pay for the final good/service and thus influence an organisation's revenues, firms often give precedence to the satisfaction of external customers at the expense of internal customers. Similarly, the marketing literature affords relatively greater attention to external customers. Much of the empirical research to-date focused on the service quality issues relating to external customers (Zeithaml, Parasuraman and Berry, 1990; Woodruff, 1997). As one of the fervent proponents of external customer orientation, Harari (1991), questions if internal customers should even exist at all, and reports that each person's focus should be on the outside because internal satisfaction is irrelevant to the end goals of the organisation. Harari's (1991) claims, however, are not research-based and are anecdotal. In the literature, the internal exchange and satisfaction of the needs within the organisation remain overlooked, and Lusch, Brown and Brownswick (1992) believe the topic requires systematic investigation.

1.2.2. Internal customers

Internal transactions take place between divisions of the firm before the final good or service is delivered to the external customer. Literature distinguishes between two types of internal customers. First, Berry (1981) views employees as customers of an organisation as internal customers whose satisfaction and motivation could be utilised to enhance external customer satisfaction. To this end, Berry (1981) suggests that organisations should aim to attract, develop, motivate and retain qualified employees and utilise them at jobs that can satisfy their needs. Consequently, treatment of employees as customers is anticipated to result in employee satisfaction (Berry and Parasuraman, 1991). In the same way, George (1977) also claims that satisfied employees are pre-requisite to having satisfied external customers.

Although the importance of satisfying customers is a central theme in marketing (Barnes, 1989), the emergence of the notion of 'internal customer' is rather recent. The internal customer concept used in this research is different from the internal customer notion Berry (1981) describes.

Following Zeithaml, Berry and Parasuraman (1996), the internal customer, for the purposes of this research, refers to a division that buys goods or services from another division within the same organisation. The key differentiation of the internal customer definition from the employee referred to by Berry (1981) is the emphasis in each definition. The definition adopted in the current research is not directly concerned with the buyer as an employee, rather, it views the buying division as a customer. Given the attention which has been given to study the characteristics of organisational effectiveness from the perspective of those who are the organisation's external customers (Parasuraman, Zeithaml and Berry, 1985; Zeithaml, Berry and Parasuraman, 1996; Fisk, Brown and Bitner, 1993; Nicholls, Gilbert and Roslov, 1998; Taylor, 1994), much less has been reported about organisational effectiveness from the perspective of internal customer satisfaction.

1.3. Value

There are difficulties in providing a definition of value on which many people may agree. Major domains of value include shareholder value, employee value and customer value (Figure 1.3). Shareholder value refers to the value that the organisation delivers to its shareholders which is usually measured using economic value added, market value added and shareholder value added (Cornelius and Davies, 1997). On the other hand, employee value has two perspectives. First, the value that the employees deliver to the organisation and second, the value that organisation delivers to its employees. The value that organisations provide to employees has hardly received any academic interest whereas the value that employees deliver to organisations through their skills, job performance, etc., is examined by various researchers (Anderson and Oliver, 1987).

The value is defined by Porter (1985) as the amount buyers are willing to pay for what the firm provides. This definition of value is consistent with this research which attempts to gain insights from the customer's perspective. Smith and Nagle (2002) state that the customer value represents the objective worth to a customer of satisfying the benefits he or she seeks from a product or service. The customer value may be broken down to three categories.

First, the customer value means the value customers deliver to the organisation which is concerned with the profits obtained from customers over their lifetime with the organisation (Payne, Holt and Frow, 2000). Second, external customer value refers to the difference between the net value, the difference between the costs and benefits of transaction that accrues to the external customer. Third, internal customer value is concerned with the net value –difference between costs to and benefits perceived by internal buyers during internal exchange of goods or services. Albrecht (1992) highlights the connotation between quality and customer value and contends that delivering customer value is the only thing that matters in the new world of quality.

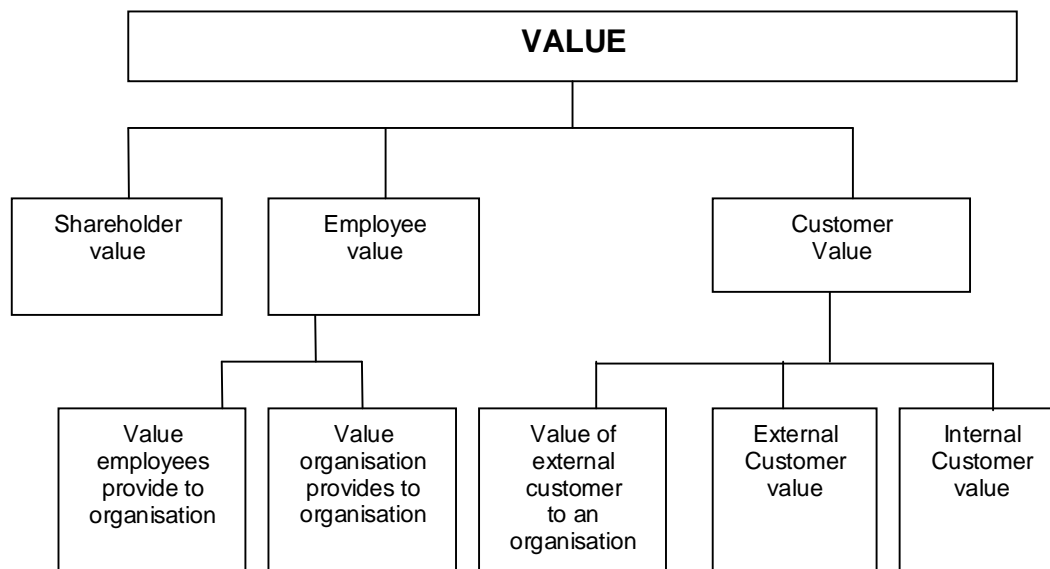
It is always the customer that counts regardless of whether the customer is external or internal. For this reason, only when the customers are satisfied, has the job been properly executed. It is believed that the inability of an organisation to create value for internal units may restrict its ability to create value for external customers. In recognition of the growing importance of internal customers, organisations are now encouraged to focus on internal processes and aim to deliver value to their internal customers (Naumann, 1995; Gale, 1994; Day, 1990). The development of Business Process Reengineering in the late 1980s shifts companies' focus to their internal processes and urges them to find ways to improve the efficiency of their processes that occur in their supply chains so that the net value accrues to the external customers.

Although the importance of providing superior quality to internal customers has been repeatedly stressed, prior studies have often failed to examine internal transactions from a value point of view. The value of the service exchanged as perceived by the internal customer (internal customer perceived value) constitutes one of the pillars of this research. Internal customer perceived value is defined as the internal customer's overall assessment of what is received and what is given (Zeithaml, 1988). Also, value lies at the heart of competitive advantage and the primary objective of most service organisations is to achieve external customer satisfaction (Jones and Sasser, 1995) through providing value.

In order to provide value, organisations are encouraged to understand what creates value in the first place (Lichtenhal, Wilden and Long, 1997).

Figure 1.3

Value hierarchy

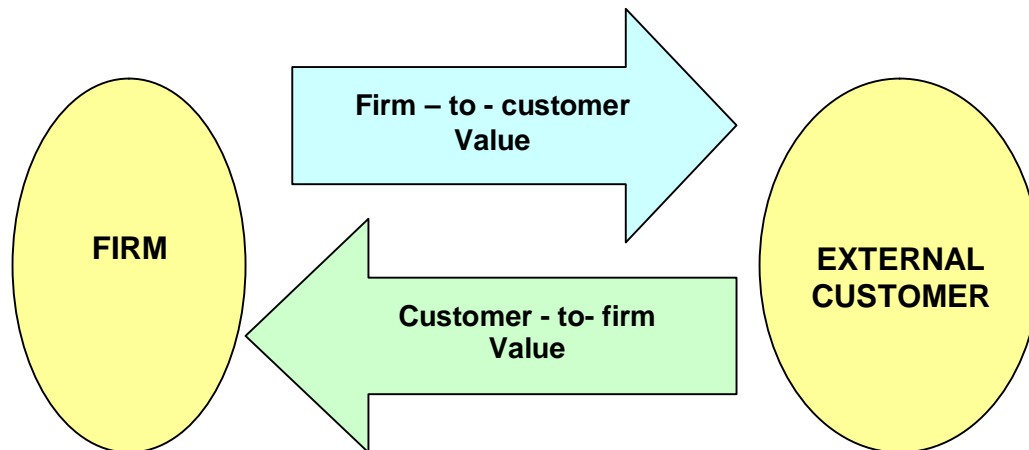


1.3.1. External customer value and internal customer value

The marketing literature affords relatively greater attention to the value the customers deliver to organisations than the value that organisations deliver to their customers.

Figure 1.4.

The two perspectives of customer value



Sommers (1999) who surveys the banking industry in the U.K., notes that for many banks, the term “customer value” is used solely to refer to the value of the customer to them, rather than the value they create for the customer. In this context, the term value involved attributes that are important for the customer in meeting their needs. One disadvantage of this approach is the narrow focus on internal processes at the expense of external factors and concentrating on customer needs which is only one group of needs amongst inter-connected stakeholders. An increasing number of companies now base their price on the external customer’s perceived value. Kortge and Okongwo (1993) suggest that organisations must deliver the value promised by their value proposition, and the customer must perceive this value. Understanding what buyers value within a given offering, creating value for them, and then managing it over time have long been recognised as essential elements of every market-oriented firm’s core business strategy (Drucker, 1985; Porter, 1985; Slater and Narver, 1998).

Current research is neither concerned with the value of a customer to the organisation in the long-term nor the value that an organisation provides to its external customers. Rather, it restricts its focus on the value that results from internal transactions, only.

One of the key advantages of understanding how value is created in internal market structures is that the managers can make better business decisions on how to expand service activities, or how to reduce activity levels through out-sourcing. Marketing Science Institute (MSI) has included customer value in the list of research priorities, and the Institute for the Study of Business Markets at the Pennsylvania State University and the centre for Business and Industrial Marketing (CBIM) at Georgia State University gave special attention to business-to-business marketing and integrated customer value research in their research programs.

The concept of value is examined mostly either from the external customer's or the supplier's perspective. With the introduction of business process reengineering in the late 1980s, organisations began to focus on the way in which internal processes are being performed and to seek methods to improve efficiency. The internal customer value is defined as the difference between the results (benefits) they receive in relation to the total costs both the price and other costs to customers incurred in acquiring the service. Zeithaml (1988) points out that the buyers are concerned with the costs of obtaining the perceived benefits because they typically compare costs and benefits before they make purchase decisions. As internal services increase, among other things, new questions such as 'how do we assess or price their value' would arise (Mills and Ungson, 2001). Although many researchers agree that external customers today are strongly value oriented (Heskett *et al.*, 1994; Parasuraman, 1997), it is not yet known if value for internal customers is deemed equally important or if the internal price charged between divisions does influence the value received by the internal customer.

Deming (1986) argues it is imperative that internal systems are aligned to service the external customer with each internal sub-system adding value to others within the organisation that are dependent on it as though the other systems are customers. Current knowledge on how price decisions are made by organisations is limited, particularly in relation to customer value created by organisations (Cressman, 1999). Slater (1997) makes a similar recommendation stating that the value creation should start internally.

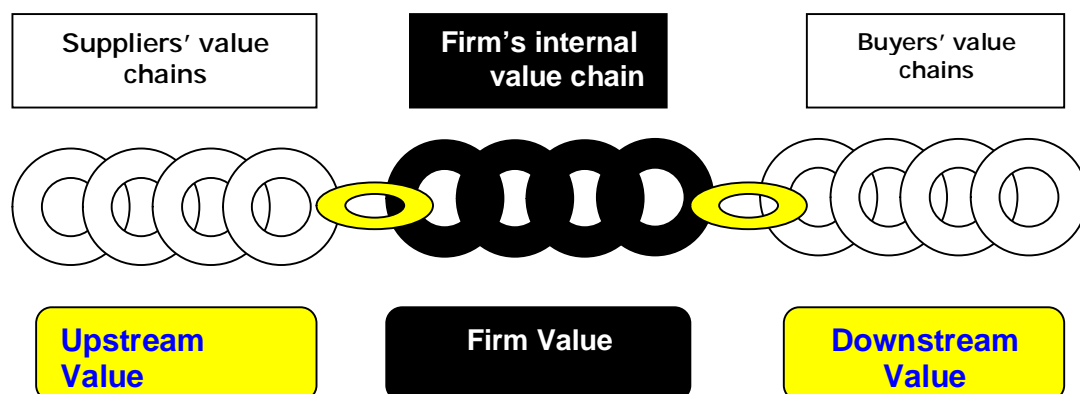
Gronroos (1981) states that organisational units strive to provide their external customers with better performance, lower costs and other benefits of value, and adds that these units should also provide superior service to their internal customers for similar reasons.

1.4. Value chain model and competitive advantage

The value chain analysis (VCA) as devised by Porter (1980) views an organisation as a chain of inter-connected activities for transforming inputs into outputs that customers value. At each stage of the process, value is added to the product or service. A firm's internal value chain begins at the conception stage of the product or service and ends with the delivery of the final product or service to final consumer.

Figure 1.5

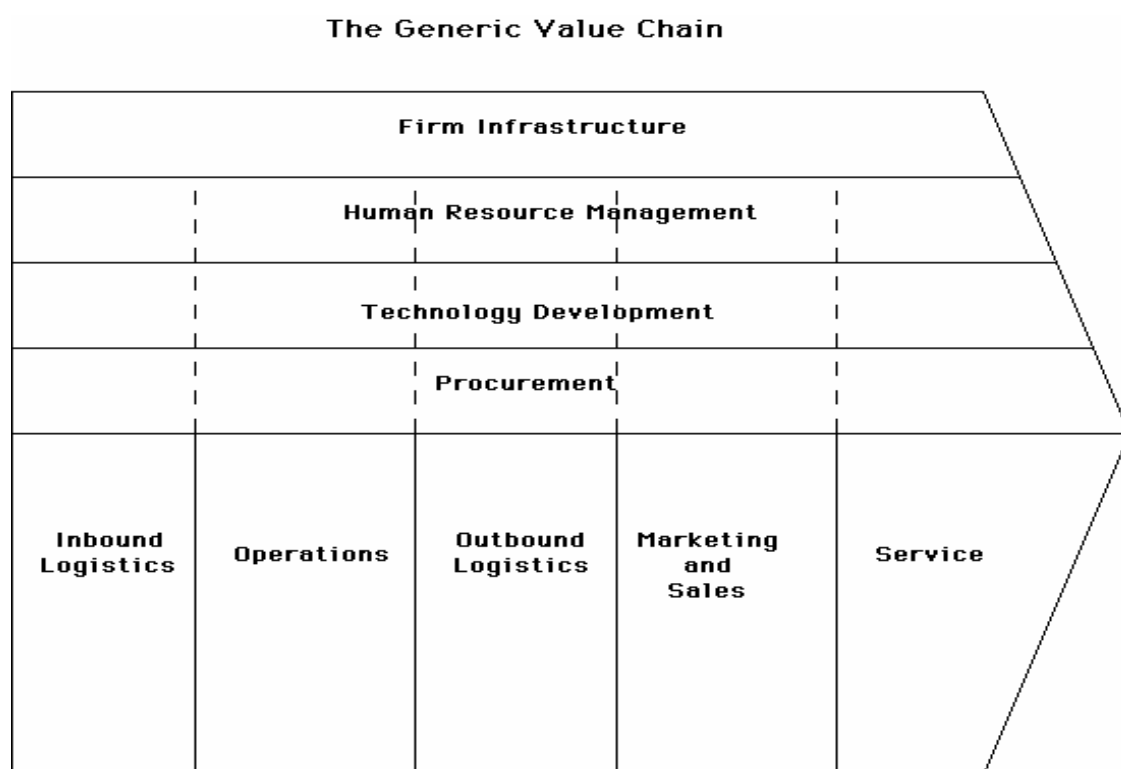
Integrated value chains (adapted from Porter, 1985)



The value chain model addresses the linkages among all participants in the value creation process including associations between internal and external customers by examining every activity, process and function an organisation performs in designing, producing, marketing, delivering and supporting a product or service.

Figure 1.6

The generic value chain (Porter, 1985)



The generic value chain (1985) is essentially devised for manufacturing organisations, and provides an important tool to detect customer orientation, particularly to recognise internal as well as external customers. Pearce and Robinson (2005) exemplify the value process by reporting that operating personnel are internal customers of the accounting department for useful information and also the purchasing department for quality, timely supplies.

When they are served with quality, efficiency and responsiveness, value is added to their efforts, and is passed on to their internal customers and, eventually, external customers.

Despite several authors' support for the usefulness of the value chain analysis, a survey carried out by Chenhall and Langfield-Smith (1998) covering 140 largest Australian manufacturing firms shows that value chain analysis is adopted by less than half (49%) of the manufacturing companies surveyed. This is a relatively low adoption rate among other management accounting practices.

The value chain analysis provides an insight and lays down a useful framework which allows the researcher to consider the activities involved in the production of services. Brignall *et al.* (1991) propose that a closer alignment of a service organisation's responsibility centres with its value chain might be a source of competitive advantage. Likewise, Emmanuel and Mehafdi (1994) suggest that transfer pricing can be examined from a competitive advantage perspective using the value chain.

On the average less than 20 percent of company employees come into contact with external customers while the other 80 percent service internal customers that are units with real performance expectations (Brinker, 1994). For this reason, whether internal processes are performed to the internal customers' satisfaction is important. Effectiveness and efficiency realised in performing internal activities can enhance overall service quality and ultimately result in reduced costs (Davis, 2001). Therefore, there is seemingly a relationship between internal orientation and competitive advantage.

1.5 Out-sourcing

The notion of internal customer perceived value is also pertinent to out-sourcing decisions. Out-sourcing may be defined as buying in services from external suppliers rather than providing such services internally (Ward, 1993). It is agreed that value is relative because it is based on perceptions of the way a service is delivered and on initial customer expectations. The key strategic issue in buying internally or out-sourcing is whether an organisation can achieve competitive advantage by performing an activity internally usually cheaper, better or in a more timely fashion or with some unique capability in a sustainable fashion (Quinn and Hilmer, 1994).

Particularly in a business environment where organisations are cost-conscious, and out-sourcing of services, in particular, is growing in popularity, survival of many business units increasingly becomes subject to their ability to out-perform their rivals through distinctive benefits embedded in their offering. The role of internal pricing on out-sourcing decisions is discussed in greater depth in Chapter 4.

1.6. Pricing issues

Pricing is one of the most contentious areas of industry practice and academic research. Although there seems to be an agreement on the importance of pricing for a company (Marn and Rosiello, 1992; Simpson, Siquaw and White, 2002), the manner in which prices, in general, are determined is of concern. Samli and Jacobs (1994) consider pricing research to be more complex and less exacting, and as such, most academicians do not seem to find the pricing areas as esoteric as some other areas of marketing. Another issue as regards pricing research is that because there have not been many pricing studies, the motivation for undertaking additional studies may not be present. As discussed in greater detail in Chapter 2, empirical evidence exists on the ad hoc nature of price setting in the industry (Wetenhall, 2003; Monroe and Cox, 2001; Buzzell and Gale, 1987).

The evidence from past research reveals that prices are determined by intuition, rules of thumb, outright dogma, top management's higher wisdom or internal power fights (Simon, 1992).

Given that the pricing practices of businesses generally lack sound analysis, deciding what price to charge for various goods and services sold by one organisational unit to another in the same company is probably one of the complex issues confronting managers. These intra-company charges are ultimately reflected in the statement of financial performance or performance reports of the respective divisions.

1.6.1. Transfer pricing

The price charged by one segment (sub-unit, department, division) of an organisation for a product or service supplied to another segment of the same organisation is termed the “transfer price” (Horngren and Foster, 1991). Price charged to a subsidiary or allied organisation abroad is termed ‘international transfer price’ which involves complex taxation issues. Pricing goods or services destined to allied organisations within the same organisation and within the same country is called ‘domestic transfer price’. The current research focuses on domestic transfer price.

Transfer pricing is a sub-system within the management control systems which provides the focus for all those activities designed to help ensure that overall operating coherence is maintained, and that the organisation retains a capability to survive in its uncertain environment (Otley, 1994). A sound transfer pricing system is therefore considered essential for the optimal allocation of resources and provision of appropriate measures of divisional profit measurement (Tang, 1992). Through performance evaluation, the information used to decide where to buy and where to sell provides an input to other decisions, such as the continuing or discontinuing of a product or service, the expansion or contraction of the division, the promotion or sacking of the manager.

These decisions have some effect on resource allocation within the firm. Therefore, the monetary value placed on the internal good or service may have far-reaching consequences (Radebaugh and Gray, 1997).

According to Cooper and Slagmulder (1998), establishing an accurate transfer pricing system is a necessary first step which should be supplemented by intra-organisational cost management system and micro-profit centres. Although there is consensus on how important it is to get the transfer price right (Benke and Edwards, 1980; Eccles, 1985; Adler, 1996), there is also evidence that, like prices in general, determination of transfer prices, too, is largely arbitrary (Emmanuel and Mehafdi, 1994). Transfer pricing is generally considered within a fiscal context.

In addition to the rather casual approach of firms evidenced in the literature, another dimension of internal transaction, whether internal price does in any way affects the value received by the internal buyer is first raised by Emmanuel and Mehafdi (1994). They suggest that transfer pricing should be examined from a competitive advantage perspective using the value chain. The issue of transfer pricing is important for organisations because transfer pricing practices affect economic decisions, which in turn affect corporate performance. Transfer pricing practices also have a bearing on performance measurement, evaluation and reward, which influence perception of fairness by individual managers (Eccles, 1985). If the basis of underlying transfer prices is flawed, the subsequent decisions regarding the allocation of resources are also likely to be flawed, leading to some efficient units being closed while less efficient operations are expanded (Ward, 1993).

1.7. Service businesses

Kotler (2003) defines service as 'any activity or benefit that one party can offer to another, that is essentially intangible and does not result in the ownership of anything'. A more detailed discussion on several definitions of service and major differences between goods and services is presented in Chapter 2.

The decision to conduct this research in a services setting was made for two reasons. First, the services industry which, according to Australian Bureau of Statistics' classification (ABS 2004) comprises accommodation, transportation and storage, finance and insurance, property and business services, education, health and community, cultural and recreation, personal and other services has been the fastest growing sector for the past few decades with the increase predicted to continue. Services represent around 25-30 percent of world trade, and are growing at a rate faster than trade in manufactured goods. In addition, services account for two-thirds to three-quarters of the gross national product, not only in the United States, but also in many other highly developed industrial nations (Lovelock, Patterson & Walker, 2002). In Australia, the services sector generated 78 percent of GDP in 2000/01 and provided employment for approximately 82 percent of the work force (ABS cat no.5206). In the USA, 80 percent of the work force is employed in services (Zeithaml & Bitner, 2000) whereas in New Zealand, the service industry employs 82 percent of the work force (McColl-Kennedy, 2003).

The second reason is that, currently, no knowledge exists as to the implications of internal pricing of services on internal value creation. Despite the growing importance of services in developed economies, most of the empirical studies on transfer pricing have concentrated on physical goods and manufacturing organisations. The need for more research into under-researched costing issues in services is obvious (Brignall *et al.*, 1991). Keegan and Howard (1988) argue that transfer pricing in service organisations is complex and challenging. World-wide, the present knowledge on transfer pricing practices in service organisations is patchy, and very little is known about service businesses' transfer pricing practices in Australia. It is also not known if transfer price has any bearing on the perceived value for internal customer.

1.8. Summary

Although price is recognised as a major choice criterion in industrial purchasing decisions, evidently, it has received little empirical attention in industrial buying research (Kelly and Coaker, 1976). Furthermore, limited empirical work appears to exist on value for internal customers. As discussed in more depth in Chapter 2, the present knowledge on transfer pricing practices in service organisations is very limited. Therefore, this research attempts to integrate domestic transfer price with internal customer value for the first time in the accounting literature, and thus offers a new perspective for understanding the implications of domestic transfer price on the value generated during internal exchange of services. Scapens (1990) indicated that there is a considerable difference between the theory of management accounting as portrayed in current textbooks and management accounting practice. Therefore, there is a need for researchers to investigate the nature of existing management accounting practice in order to understand better the situation and contexts in which particular theoretical techniques may be appropriate in practice. Further, some authors (Otley, 1980; Choudry, 1986) complain that management accounting research had very little impact on practice. Drury and Dugdale (1992) attribute this perceived gap between management accounting theory and management accounting practice to the lack of in-depth company studies or surveys of management accounting practice. Finally, Johnson and Kaplan (1987) criticise management accounting research, and claim that management accounting research and textbooks have concentrated on developing sophisticated models in simplified production settings that bear little relation to problems faced by practitioners.

The remainder of this thesis is organized as follows. Chapter discusses the relevant literature. In Chapter 3, theoretical frameworks underpinning this study and research philosophy and research methodology are outlined. Chapter 4 focuses on analysis of data and compares and contrasts findings of this study with the literature. Finally, Chapter 5 presents a summary of key findings, contributions of this research, limitations of this research and implications for further research.

CHAPTER 2: LITERATURE REVIEW

This research represents the first attempt in the accounting literature to integrate the frameworks of transfer price and value creation for internal customer and, consequently, no literature exists on the interplay between transfer price and internal customer value. The literature specific to the current research on (1) pricing and transfer pricing; (2) external versus internal markets; (3) value; and (4) value chain analysis and competitive advantage is critically reviewed.

2.1. Pricing

The price is defined as “the summation of all sacrifices made by a consumer in order to experience the benefits of a product (Buttle, 1997). The Importance of getting the price right in maximising profits is stressed by McKinsey consultants Marn and Rosiello (1992) who study 2462 companies and report that a one percent price improvement generates an average of 11.1 percent increase in profits. Although appropriately pricing goods and services is recognised as the basic and critical decision facing an organisation (Morris, 1987), price determination is still the most inconspicuous, secretive, sacrosanct, and least rational of the marketing strategy components (Abratt and Pitt, 1985; Morris and Fuller, 1989). In addition, prior researches on pricing prove to be of very little practical help for most managers (Bonoma *et al.*, 1988).

2.1.1. Current pricing practices and issues

McKinsey and Company’s Global Survey of Business Executives (2005) finds that pricing is now one of the most pressing concerns for business. However, Simpson, Sikuaw and White (2002) survey purchasing managers of 110 of the top Fortune 500 companies to ascertain, among other things, if price is an important criterion in their supplier evaluation process.

They find that only a quarter of respondents employ pricing as part of their evaluations of suppliers, and only 24 percent of those respondents employing evaluative weighting systems assign weights to price. It is important to note that this finding applies to business to business transactions.

Although price directly affects revenues and is a reflection of a product's positioning in the market place, previous studies indicate that the pricing issue is not being given the appropriate attention by firms that it deserves. In setting prices, firms are typically confronted with two issues: (1) appropriating rents; and (2) balancing competing internal interests; hence, pricing capability involves systems and processes that a firm develops to address these two issues (Dutta, Zbaracki and Bergen, 2003). According to Nagle and Cressman (2002), few companies proactively manage their businesses to foster more profitable pricing, and pricing strategically involves managing customers' expectations to induce them to pay for the value they receive. Nagle and Cressman (2002) also conclude that in firms, often, no one can identify who in the organisation is responsible for setting prices or evaluating the effects of prices on the overall profitability of the organisation. Nagle and Cressman (2002) report that in some cases, responsibility for pricing rests with no one, at all, and argue that because price metrics do not adequately capture value, customers may object or refuse to pay the price demanded by the organisation because they do not find sufficient value to justify the price.

As discussed in the following paragraphs, extant literature supports the view that the marketing concept's basic premise of understanding customers' value drivers and providing value propositions accordingly is being consistently ignored by firms. According to Monroe and Cox (2001) the data relating to how companies go about pricing suggest that many companies make pricing decisions and changes in pricing policy without an established process for managing the pricing activity.

As a result, they conclude that most companies do not even have a serious pricing strategy and do not conduct pricing research to develop an appropriate strategy. McKinsey & Company's Pricing Benchmark Survey shows that only about 15% of companies do pricing research, and in most firms, prices are determined by intuition, rules of thumb, outright dogma, top management's higher wisdom or internal power fights (Simon, 1992).

Berry and Yadav (1996) demonstrate that, more than any other area, pricing for external customers is dominated by ‘gut feel’ and ‘personal prejudice’ rather than a careful calculation of what the market can bear, and conclude that the pricing of services in the United States is a ‘mess’. Despite increasing competition, survey of pricing practices on a usable sample size of 270 manufacturing firms in the USA, Noble and Gruca (1999) find that cost-based pricing is still the dominant pricing strategy. Cost-based pricing method is considered as an inward oriented strategy that involves company and product considerations and ignores requirements of the external customer and competitive conditions (Day and Nedungadi, 1994).

On the other hand, some firms assume that customers care only about price, and as a result, they resort to an endless spiral of cost-cutting and price-cutting (Buzzell and Gale, 1987). While acknowledging the importance of costs in setting prices, it is crucial to understand that prices alone do not reflect the value delivered to customers, and Cressman (1999) claims warning bells are ringing for practitioners for ignoring value in their pricing strategy.

2.1.2. Reference Prices

Studies that examine whether firms use benchmarking or internal reference prices in evaluating prices are very few in number. Bolton and Drew (1991) contend that the customer’s assessment of value depends on the customer’s frame of reference. Thompson, Strickland and Gamble (2005) show that many companies today are benchmarking their costs of performing a given activity against competitors’ costs and/or against the costs of a non-competitor in another industry that effectively and efficiently performs much the same activity). Thompson et al.’s (2005) conclusion however is anecdotal. For example, Day’s (1990) empirical study finds that in many businesses, less than 15 percent of effective management time is directed to customers, while no more than 5 percent is devoted to thinking about competitors with the remaining 80 percent spent on internal matters that only indirectly deal with customers or competitors. The evidence demonstrates that most businesses do not focus enough on the two key elements that will determine success: customers and competitors (Day, 1990).

2.1.3. Services and pricing of services

Manufacturing industries can be defined as being those involved in the making of tangible articles or material that did not exist before, by the use of physical labour and/or mechanical power (Ward, 1993). Distinctive features of services require an approach to pricing that is significantly different from the pricing of goods. Definitions of service, and what constitutes a service, range from the narrow to the broad. In 1960, the Definitions Committee of the American Marketing Association defined services as “activities, benefits or satisfactions which are offered for sale, or are provided in connection with the sale of goods”. The definition of what constitutes a service also varies across the service sector. Clark (1940) divides all economies into three sectors: primary (agriculture), secondary (manufacturing) and tertiary (services). Services tend to be more non-standardised, heterogeneous, and customised at the point of sale than products (Lovelock, 1984). The service sector composed three parts – domestic related services (food and lodging); business services and others (including health care, recreation and education). There are difficulties to be precise about what is a good and what is a service.

For instance, Shostack (1977) notes that there few pure goods or services because most products exhibit varying degree of tangible and intangible elements, and services are intangible elements. On the other hand, Parasuraman (1997) adopts a different approach by suggesting that if a product's core benefit is more tangible than intangible, then the product should be considered a good; and if it is more intangible than tangible, it should be considered a service.

A service is an intangible item that depends to some extent on interaction between the buyer and seller for its provision (Grosse, 1996). For Gronroos (2001), the central distinguishing feature of services from goods is the fact that services are activities rather than things. Among distinguishing characteristics of services, Gronroos (1982) and Lovelock (1983) point to the intangibility aspect of services, simultaneous production and consumption (processes) and interaction of supplier and customer during the process of service delivery.

According to Zeithaml and Bitner (2003), intangibility is the single most important difference between goods and services, and it is the key determinant of whether an offering is a service or not. On the other hand, Bowen (1990) disagrees with the foregoing conclusion, and believes that there is over emphasis on the importance of intangibility, as the service provider's offer reflects its productive capacity rather than the tangible or intangible nature of the offer. Particularly the intangible nature of services makes it very difficult for consumers to judge their quality and value.

Because services often remain integrally enmeshed with manufacturing goods or with the delivering of goods, the distinction between goods and services is imprecise, and the boundary between manufacturing and services is blurry (Berry and Parasuraman, 1991). Levitt (1972) claims that there is no such thing as a service industry; there are only industries whose service components are greater or less than those of other industries, everybody is in service.

Both in pure services and supplementary services associated with goods (i.e., finance, insurance, after-sales service), Lovelock (1984) argues that services hold the key to future success no matter what the product is, and that every corporation now competes (or should be competing) in terms of services. Service activities are the most critical driver of competitiveness today (Kostecki, 1994), and Emmanuel and Mehafdi (1994) highlight the need for further research in service industries because services have long been ignored in the literature.

Several studies (Finn, 1985; Zeithaml and Bitner, 2000) demonstrate that product intangibility greatly increases the degree of perceived risk. Standardised services are easier to evaluate because there is often a reference price as a basis for comparison. Some other services (i.e., professional services), however are far more difficult to evaluate because their intangibility makes the evaluation a very complex task. In contrast, many attributes of a tangible product can be evaluated prior to purchase. Moreover, while goods are returnable, services are not. Because services cannot be returned in the event of a service failure, service providers often tend to offer some compensation for their customers.

With a view to explaining the differences in evaluating services, Zeithaml and Bitner (2003) identify the following three properties: (1) search qualities include attributes that a customer can determine before a purchase decision is made; (2) experience qualities involve attributes that can be judged only after purchase or during consumption; and (3) credence qualities that encompass attributes that the customer may not be aware of or lack the technical knowledge to evaluate even during or after consumption. Because experience and credence qualities dominate in services, consumers employ different evaluation processes than those with goods, where search qualities dominate. Even after purchase, service attributes are harder to observe.

In an external customer context, price is an important evaluative factor for services (Lamb, Hair and McDaniel, 1999; Wilson, 1994; Pride and Ferrell, 2000). The pricing of services involves a far more complex array of choices than might at first be apparent. The factors that affect optimal pricing in a services context may differ from those involving goods for several reasons. First, the relative intangibility of services compared to goods may lead consumers to place greater emphasis on extrinsic cues rather than the intrinsic attributes of the service itself (Zeithaml, 1988). Extrinsic cues include attributes that relate to the service but they exist outside the service package.

They primarily include psychological benefits associated with the services, such as prior experience, brand name, country of origin. Intrinsic cues involve service or product-specific benefits, both core and supplementary, provided to customers. Price may, as such, enable consumers to make judgments about the likely quality of the service. Second, the degree of customisation and consumer involvement that characterise many services allow the service product attributes and price to be jointly tailored to suit consumer needs (Lovelock, 1996). Third, services are highly perishable and short-run capacity is often limited by human resource constraints. As a result, demand management issues are of particular concern, and price often plays a role in smoothing demand.

Mills and Sweeting (1992) survey 42 service and 52 manufacturing businesses in the U.K., and find that despite differences, physical and other, between products and services, there are many similarities in pricing of goods and pricing of services (Table 2.1).

Table 2.1
Pricing decisions

Pricing method	Manufacturing firms (%)	Service firms (%)
Cost-based method	71	68
Market-based	17	11
Combination	12	21
Cost-based methods:		
Contribution	27	28
Full cost	59	45
Return on investment	12	20
Other	2	7

It is evident that, cost-based pricing remains to be the most popular method for pricing for manufacturing and service businesses.

Finally, the relationship aspect of many services introduces important temporal pricing and customer retention issues into the pricing decision that often differ from loyalty issues involving goods. The decision processes relative to the purchase of goods and services vary, and these variations influence the acceptable price and purchase decisions. As far as the terms of customer need fulfillment and satisfaction are concerned, elements of risk as well as the importance of the risk also vary for services and products.

2.1.4. Costing of services

One of the key differences between the costs of manufacturing organisations and service organisations is that direct labour costs are the major cost elements in services. Also, the overhead costs often constitute a substantial part of total costs in service businesses (Hussain and Gunasekaran, 2001).

Dearden (1960) argues that the principal source of difference as far as applicable costing systems are concerned, is the diversity of processes present in service industries. Even though manufacturing businesses lend themselves to the use of a few basic cost accounting systems because processes used are, by and large, similar to each other. Furthermore, from a strictly cost accounting point of view, Dearden (1960) identifies unique characteristics of service industries which are different from manufacturing industries, as follows: 1) they do not have finished goods inventories; 2) there are no product costs; 3) measurement of output is more difficult in service industries; 4) service industries are labour intensive and most of this labour is fixed in the short-term, non-labour costs are also fixed; 5) with some few exceptions, service industries are generally free from foreign competition, and many are affected only by local competition. Also, service industries typically have relatively large amounts of joint costs and inter-related service products.

Ward (1993) views 'tangibility' as the key differentiating factor between service and manufacturing businesses, stating that tangibility makes it more difficult to measure the value of the product accurately because it hinges on the perception of the customer as to what has been received. Similarly, Brignall *et al.* (1991) stress that the intangibility compounds the product costing issues for services. Fitzgerald *et al.* (1992) identify the factors which are typically found in services. These factors are: the intangibility of many aspects of the service package; the usual presence of the customer in the service delivery process; the heterogeneity of service staff performance and customers' service expectations; the usual simultaneity of service production and consumption. These distinguishing characteristics have a bearing on service costing.

From the management control systems point of view, differences between service industries and manufacturing industries are minor. Therefore, Dearden (1960) argues that cost accounting principles used for manufacturing businesses are not applicable to service businesses. Ward (1993), however, finds that measurement difficulties brought about by intangibility complicates financial monitoring and control of service organisations.

Inadequacy of traditional management accounting systems in reporting costs is well documented in the accounting literature (Johnson and Kaplan, 1987; Bhimani and Brimson, 1989; Eccles and Pyburn, 1982). One of the key shortcomings of traditional management accounting systems, which also concerns the current research, is its failure to accurately assign the overhead costs. It is evident that most businesses, manufacturing and services alike, do not know costs accurately. Especially, the fact that most businesses continue to prefer cost-based methods in pricing, the absence of accurate cost information, is alarming which adds weight to the arbitrary nature of pricing. Traditional costing systems are also inadequate to analyse the costs of the value chain. In 1960s, Dearden reports the lack of a costing technique that is specifically applicable to service industries. Then Johnson and Kaplan (1987) highlight deficiencies of the current cost accounting systems stating that they are not appropriate for costing purposes because they produce misleading product costs.

Hussain and Gunasekaran (2001) argue that the solution to more accurate costing lies in the implementation of activity-based costing (ABC), and add that costs in service businesses receive relatively less attention in the literature. From a costing perspective, service industries differ from manufacturing industries in the following ways: (1) almost all costs are period costs; (2) the output is difficult to measure; and (3) service industries are typically labour-intensive with most of the labour fixed at least in the short-run (Berry and Yadav, 1996).

Activity-based costing is based on the idea that products cause activities that cause costs to occur, and these costs should be assigned to the products that caused them. In other words, costs are analysed and collated around activity pools, and then costs are allocated to activities using individual cost drivers. Although there is support that ABC would produce more accurate cost information, Collins and Munter (2001) warn that prior to implementing the ABC, organisations should know precisely what the organisation's products are.

Service organisations generally offer a wide array of services, and inability to provide a precise definition of service products is an impediment. West and West (1997) point to the need to implement activity-based costing system in the health care industry. There are similar suggestions for other areas of services including health cooperatives (Lee and Nefcy, 1997), university support centre (Acton and Cotton, 1997), and financial industry and all services industries (Hussain and Kock, 1994).

Regarding the implementation of the activity-based costing technique in service industries, Anderson and Narus (1995) report that ABC is largely applied to the measurement of manufacturing and product-related costs and only a few studies exist on the application of ABC to services.

Three reasons are offered to explain the lack of studies on ABC: (1) managers at many companies rarely define concretely what constitutes a particular service and its various levels which makes it difficult to track which customer got what service and allocate related costs; (2) accounting systems in many companies allow sales forces to pass service costs on to other departments; and (3) many companies are organised around products rather than around market segments or customers. Understanding the cost and value of service activities is a requirement of the twenty-first century (Hussain and Gunasekaran, 2001).

2.1.5. Bases for service pricing

Mills (1988) surveys 52 manufacturing and 42 service companies and finds that 65% of respondents use absorption costing as a basis for pricing. Similarly, Zeithaml *et al.* (1985) find that service firms predominantly use cost-based pricing. Cost-based pricing involves setting a service price based on all the costs plus a desirable profit. As Tung, Capella and Tat (1997) observe, the traditional cost-plus approach to setting prices still dominates even in service businesses where costs are hard to isolate. Competitive pricing is adopted where costs are not used or are not the material component in pricing decisions. Tung, Capella and Tat (1997) also find the simplistic nature of cost-based pricing ineffective and inadequate in a complex and competitive business world. Similarly, Nagle and Holden (1995) and Harrison and Wilkes (1975) view the failure of cost-based pricing to consider consumer and competitive information as its major weakness.

Research from the consumer behaviour literature suggests that price may affect consumers' quality perceptions by serving as a heuristic cue (Monroe and Krishnan, 1985), and services pricing is an important determinant of consumer-switching behaviour (Keaveney, 1995). Given the importance of price in generating revenues and profits for a company, Tung, Capella and Tat (1997) regard the approach used by service firms in price setting as relatively unsophisticated.

2.1.6. Transfer pricing

Transfer price is the price charged by one segment (sub-unit, department, division, etc.) of an organisation for a product or service supplied to another segment of the same organisation (Horngren and Foster, 1991). The domestic pricing literature describes transfer pricing as a part of the management control system of the company with two main objectives: the promotion of goal congruence; and the provision of a suitable system of performance measurement and evaluation (Benke and Edwards, 1980; Grabski, 1985).

Otley (1994) views transfer pricing as a tool for the maintenance of operational coherence and retention of organisational capability for the company to survive in an uncertain environment. Deciding what price to charge for goods and services supplied by one organisational segment to another in the same company is probably one of the major issues confronting managers.

As highlighted by Dearden (1967), the decentralisation of complex organisations such as General Motors by establishing profit centres, brought about the need for a system of internal prices that would assure optimal allocation of corporate resources, motivate divisional managers to operate their units at a high degree of efficiency and promote the welfare of the corporate group as a whole (goal congruence). The literature on transfer pricing dates back to 1956 when the first published study regarding transfer pricing was sponsored by the National Association of Accountants (USA).

The report covers 40 companies. Mehafdi and Emmanuel (1997) review empirical studies of domestic and international transfer pricing practice on a global basis over the forty-year period after 1956 (Table 2.2).

Table 2.2

Breakdown of empirical studies carried out since 1956 by country of origin (Adapted from Mehafdi and Emmanuel, 1997)

Country	Number	Country	Number
USA	46	India	2
Canada	4	Australia	1
UK	14	ASEAN	1
Sweden	3	Yugoslavia	1
France	2	New Zealand	1
Germany	1	Netherlands	1

Mehafdi and Emmanuel's (1997) work also uncovers that on transfer pricing, seventy-five mostly survey-based empirical studies had been conducted, and seventy-nine doctoral dissertations (most of which were not empirical) had been submitted. Cited studies include only Chenhall's (1979) survey from Australia.

Another Australian study by Hilton (1981), however, remains uncited. Hilton's (1981) research deals with transfer price policies used by firms in industry. Table 2.2 demonstrates how very little empirical work on transfer pricing was conducted in Australia.

The transfer pricing literature includes studies that investigate various aspects of transfer pricing such as objectives, determinants, taxation, strategy, fairness, and conflict both in the domestic and international context. A summary of the objectives of international transfer pricing is presented in Table 2.3. A comparison of objectives of domestic transfer pricing is given in Tables 4.22 and 4.23 and objectives are discussed in length in Chapter 4. Ward (1993) regards internal pricing system as a means of allocating resources in an economic fashion rather than merely recovering the costs of an internal service department.

Table 2.3**Objectives of transfer pricing for international transfers**

	Tang (1979)	Kirsch And Johnson (1991)	Tang (1992) Japan	Tang (1992) USA	Alam and Hoque (1995) New Zealand	Mueller, Gernon and Meek (1997)	Ernst & Young (1997)
Minimise overall taxes	4	1		2		1	3
Increase overall profit	1	2	1	1			1
Simplicity (ease of use of application)		3			2		
Increase overall corporate sales		4					
Facilitate performance evaluation of managers		5			3		
Evaluation of divisional performance	5		2	2	1		
Market stability					4		
Cost of administration					5		
Economic favourability					6		
Restrictions imposed by foreign countries on repatriation of profits	2			3			
Competitive position of subsidiaries in foreign countries	3			4			
Rate of customs duties and customs legislation	6			5		2	
Restrictions imposed by foreign countries on the amount of royalty or management fees						3	
Manage currency fluctuations						4	
Satisfaction of host country authorities						5	
Documentation in preparing for audit							2
Financial efficiencies							4
Performance incentive							5

NB: Numbers in boxes indicate the relative ranking of importance of each goal.

Common objectives in international transfers include increasing overall profit, minimising taxes and evaluation of divisional performance. For domestic transfers, while it is difficult to track commonalities, profit maximisation and divisional profit measurement appear to stand out as the major transfer pricing objectives. As highlighted by Borkowski (1992) and Cravens and Shearon (1997), although central objectives of transfer pricing include goal congruence, profit maximisation and performance evaluation, there is a conspicuous lack of emphasis on the outcomes of transfer pricing.

2.1.6.1. Transfer pricing methods used for international transfers

Several studies (Table 2.4) examine transfer pricing methods employed by multinational companies. Findings of major surveys spelled out in Table 2.4. point to an increase in the adoption of cost-based methods and a decrease in the use of market price based transfer pricing. Since 1979, the adoption of negotiated methods seems to be relatively steady and varies between 15-17%. It is not known, however, why companies choose the methods they use.

Table 2.4

Transfer pricing bases for international transfers

	Tomkins (1973)	Persen and Lessig (1979)	Vancil (1979)	Tang et al. (1979)	Benke And Edwards (1980)	Yunker (1982)	Tang (1990)	Al- Aryani et al. (1990)	Borkowski (1992)	Alam and Hoque (1995)
Cost- based	31%	37%	47%	50%	39%	39%	41%	50%	52%	71%
Market Price- based	48%	33%	30%	30%	44%	34%	46%	35%	33%	18%
Negotiated		22%			17%	17%	13%	15%	15%	
Other	21%	8%	23%	20%	0%	10%	0%	0%	0%	11%

2.1.6.2. Transfer pricing methods used for domestic transfers

Much of the literature focused on transfer pricing from the viewpoint of multinationals. Particularly since the early 1990s, the transfer pricing literature displays a noticeable lack of focus on domestic transfer pricing issues. Exceptions include Livesey (1967) and Piper (1969), who investigate the bases of internal pricing and the extent of divisional freedom. Other studies that look at various aspects of domestic transfer pricing practices (i.e., existence of multiple pricing bases, association between transfer pricing and strategy, level of internal trade, performance evaluation) include Rook (1971), Channon (1973), Tomkins (1973), Granick (1975), Emmanuel (1977), Finnie (1978), Drury et al. (1993) and Mehafdi (1990).

Major studies that examine transfer pricing methods used for domestic transfers are shown in Table 4.26. The prior literature and comparative evaluations are discussed in detail in Section 4.1.20. It is evident that cost-based transfer pricing is the most preferred method for domestic transfers. A survey conducted by Jaye and Blayney (1991) covers Australian manufacturing companies. There has been no published study relative to transfer pricing practices of Australian service companies.

2.1.6.3. Strategy and transfer pricing

Several studies (Eccles, 1985; Spicer, 1988; Emmanuel and Mehaftdi, 1994; Colbert and Spicer, 1995) suggest that transfer pricing is determined by both corporate and unit level strategy. Watson and Baumler (1975) propose that transfer pricing can be seen as both a consequence of, and mechanism to enhance, differentiation and integration strategy. In support of Watson and Baumler (1975), Boyns, Edwards and Emmanuel (1999) provide evidence that transfer pricing may be used to enact strategy. The transfer pricing choice may be both a result of and instrument for strategy, and this choice may vary between the two in the same organisation over time (Perera, McKinnon and Harrison, 2003).

2.1.6.4. Conflict

Like many other transactions between buyers and sellers, the internal transfer of goods and services, and related pricing and sourcing decisions, often result in inter-divisional conflict (Spicer, 1988). The source of the conflict may be the opportunistic behaviour of some division managers to improve their individual performance at the expense of overall company profit (Radebaugh and Gray, 1997) or the association between transfer pricing systems and performance evaluation (Mehaftdi, 1990).

Lambert (1979) establishes a positive correlation between the level of effect of transfer prices on customer division's profits and the reported level of inter-divisional conflict. Where the transfer pricing system affects the customer division's profits it is reported that inter-divisional conflict may be influenced by whether the buying division is free to buy from external suppliers. Presence of some level of conflict is advocated by some researchers (Eccles, 1985; Mehafdi, 1990) as a positive force while Lambert (1979) focuses on adverse effects of the conflict. For the resolution of conflicts, Watson and Baumler (1975) and Acklesberg and Yukl (1979) recommend negotiation while Lawrence and Lorsch (1967) offer four approaches to resolve workplace conflicts: (1) forcing; (2) smoothing; (3) bargaining; and (4) problem solving. Forcing involves top management's direct intervention to resolve the conflict which has a potential to create winners and losers. Forcing, therefore, may result in worsening morale and loss of motivation on the part of the losers. Smoothing over the conflict is another method of dealing with a conflict where parties to the conflict, while acknowledging the conflict situation, play down the issues and act as if the conflict does not exist. If bargaining is chosen as a conflict resolution method, parties resolve their differences through direct negotiations.

The final method of problem solving requires parties to the conflict to assume that the final solution will benefit the firm and everybody involved. With this mind set, they make utmost effort to understand the other side's position. Problem solving is considered as the most effective method to resolve differences.

2.1.6.5. Transfer pricing and out-sourcing decisions

Owing to increased globalisation (France, Da Rold and Young, 2002) and cost pressures, the need for holistic solutions for service organisations will require that focused providers cooperate along services value chains to satisfy client demands. Day (1990) proposes that no activity is sacrosanct; if something can be done better or cheaper by an outside supplier, distributor or even the customer without compromising the firm's advantages, then it should be eliminated. There may be more advantages by not doing something (Gannes, 1988). As Ward (1993) points out, it is also possible that an economic reliance on internal services may create a competitive disadvantage, as well.

Business units using internal services do not have too many incentives to compare the value they receive with the cost to the firm of providing this service due to the fact that costs of each purchase are typically spread across all business units through overhead allocation (Halal, Geranmayeh and Pourdehnad, 1993).

According to Langlois and Robertson (1995) when the sum of production and bureaucratic management costs for an activity inside the firm is less than the sum of production and market transaction costs outside the firm, the activity will take place inside the firm. When the opposite is true, the firm will outsource. Welch and Nayak (1992) establish that organisations often neglect the implications of transfer pricing on sourcing decisions which in some cases may lead to transformation of suppliers into competitors.

Competitive pressures and anticipated cost advantages make outsourcing an attractive option for organisations. Outsourcing involves understanding the strategic value of key activities and assessment of the efficiency and capabilities of providers of value both internally and externally. Quinn (1999) notes that strategic outsourcing offers firms increased profit.

The crucial issue confronting managers is to outsource the right things for the right reasons and going about it the right way. The decisions in which divisional management is most involved will include whether to sell externally or internally, whether to buy externally or internally and in what quantities.

It is recognised that through performance evaluation, the information used to decide where to buy and where to sell provides an input to other decisions such as the continuing or discontinuing of a product or service, the expansion or contraction of a division, the promotion or sacking of the manager, all of which have some effect on resource allocation within the firm. Outsourcing may be particularly attractive where outside vendors perform the services as well or better and usually in a more cost-effective fashion than a company that performs these activities.

It is evident that the transfer price charged is one of the major criteria in make-or-buy decisions, therefore managers decide which in-house activities add value, and which, by contrast, can best be performed by others (Useem and Harder, 2000).

The transfer price constitutes the basis for decision making for make-or-buy decisions (Tomkins and McAulay, 1992). It is important that the appropriate transfer pricing methods are employed and the right criteria considered. Temple and Droege (1994), who were both managers at Caterpillar Inc., recount their experience at Caterpillar at the time when decentralisation efforts were intensified by creating individual profit and service centres, reporting that the motto of the service centre read “we exist to provide support to our internal customers. If we cannot meet or exceed the value provided by outside suppliers, we risk losing the business”.

The key strategic issue in buying internally versus outsourcing is whether a company can achieve a competitive edge by performing an activity internally, usually cheaper, better or in a more timely manner or with some unique capability in a sustainable fashion (Quinn and Hilmer, 1994). Zemke and Zemke (1994) stress that the internal service often requires sub-units to justify their existence, especially where other sub-units that traditionally use their goods or services have the option to exit their relationships with internal suppliers. Sub-units are increasingly becoming independent in their sourcing.

Consequently, survival of many business units becomes dependent on their capability to outperform their rivals through distinctive benefits embedded in their offering. Linking transfer price to make-or-buy decisions in a value chain context has the potential to highlight efficacy of activities in terms of their value generation capability. This linkage has also not been empirically investigated.

2.1.6.6. Transfer pricing studies conducted in Australia

A limited number of studies on transfer pricing has been conducted in Australia. They include the following:

- a. The Ernst and Young 1997 Transfer Pricing Survey that polls international tax directors at 582 multi-national parents in 19 countries (including Australia) and 124 foreign-owned subsidiaries. Among other findings, the most important factor shaping (international) transfer policies was 'maximisation of operating performance'. This survey involved across the border transactions and attempted to acquire information which was associated with international taxation, an extremely sensitive topic for multinationals.

In addition to the fact that the context of the survey was different from the present research, it is not clear from the conclusions what is meant by maximising operating performance (i.e., minimising taxes, maximising overall profit). The primary focus of this survey is on across borders transfer pricing behaviour of multinationals.

- b. Zaman (1992) conducts a postal questionnaire survey covering 70 foreign-owned multinational companies that operate in Australia. The response rate is rather low (22.8%) which is later raised to 30 percent by reducing the sample size. Findings are based on responses from 16 respondents. It reveals that 25% of respondents use market-based transfer prices, and the balance use non-market-based transfer prices.
- c. Using a postal questionnaire and interviews, Chenhall (1979) surveys 179 divisionalised companies to examine the extent of divisionalisation and the control characteristics of Australian divisionalised firms. The survey demonstrates that 17 percent of respondents used more than one type of transfer pricing scheme, with market-based pricing being the preferred method.

Although, transfer pricing is not the primary focus, this pioneering survey seeks to investigate, for the first time, what transfer pricing methods are used by firms in Australia and whether firms use more than one transfer pricing scheme simultaneously.

- d. With a view to ascertain the rationale and methods of transfer pricing used, Hilton (1981) surveys 35 industrial companies (operating in various industries such as mining and extraction, food and beverages, textiles, clothing and footwear, paper and paper products, chemical and petroleum, nonmetallic mineral products and metal products) and three banks and three government instrumentalities. The survey is conducted by unstructured interviews.

He finds that 69 percent of respondents do not have a written policy for pricing transfers between divisions. And the magnitude of transfer pricing as a proportion of turnover does not exceed 7 percent. The transfer pricing methods used are almost equally divided between market-based (46%) and cost-based (43%) methods and the remainder of 11 percent using negotiated transfer prices.

- e. Utilising the survey method, Jaye and Blayney (1991) attempt to ascertain the cost and management accounting practices in Australian manufacturing companies. In this survey, too, the transfer pricing is not the principal objective. Among other findings, they report that cost-based is the most popular domestic transfer pricing method (69%), followed by market-based methods (18%) and negotiated transfer prices (15%) with the remainder representing other methods.
- f. Chan (1998) examines the role of culture and motives in transfer pricing negotiations between U.S. and Australian organisations. It is found that Australian negotiators has a relatively more positive view of themselves than their U.S. counterparts, and U.S. negotiators view their negotiation opponents more negatively than Australian negotiators do.

The knowledge on transfer pricing in Australian organisations is very limited and not current.

2.1.6.7. An evaluation of methodologies employed in previous studies

Initially, Colbert and Spicer (1995) conduct a multi-case research study involving four large vertically integrated high technology companies in the USA. They draw attention to the fact that surveys must be directed at the sub-unit level where internal transfers actually take place by questioning the value of surveys which relied solely on corporate manager's views.

Mehafdi and Emmanuel (1997) report that past studies on transfer pricing had three major shortcomings: (1) surveys were addressed to corporate staff – usually in the finance and accounting departments - rather than the divisional staff who have direct responsibility for internal transfers; (2) descriptive and analytical surveys were simplistic and did not ask the appropriate questions that might deter firms from responding; and (3) surveys as research instruments for such a complex problem were inappropriate.

Colbert and Spicer's (1995) and Mehafdi and Emmanuel's (1997) criticism about using the corporate level as the source of data may be justified by Hoshower and Mandel's (1986) finding that in 80 percent of the twenty-five diversified firms they survey, the locus of decisions is at the divisional level. However, the empirical evidence regarding locus of out-sourcing decision is patchy.

Vancil (1979) finds that in 7 percent of the sample the decision to outsource rests with corporate management alone, and 54 percent indicated that the divisional management alone had the authority to out-source. Eventually who should be surveyed depends on the purpose of the survey. For example, on strategic issues there is empirical evidence that strategy-related decisions are made by the top management. Although Emmanuel and Mehafdi (1997) criticise obtaining information from top management, Emmanuel's (1977) own study is based on data gathered from corporate staff. However, issues pertaining to implementation of transfer pricing policies should be directed to managers who act as buyers or providers or both during the internal exchange process.

Another issue arising from past research is the ostensible mismatch between the research methods used and the research question. In fact, a vast majority of previous studies employed a questionnaire-based survey (and in some cases, a combination of survey and interview) aimed principally at investigating the bases (i.e., cost, market price, etc.) for transfer prices (Tomkins, 1973; Emmanuel, 1977; Vancil, 1979; Burns, 1980; Tang, 1979, 1992; Borkowski, 1992; Drury, 1994). Logically, methodology is a function of research questions to which Mehafdi and Emmanuel (1997) do not make reference. Individually both Emmanuel (1977) and Mehafdi (1990) also conduct transfer pricing research using interview and questionnaire, and questionnaire, respectively. In addition, Mehafdi and Emmanuel (1997) fail to provide examples of questions that researchers allegedly choose not to ask. It is noteworthy however that one of the major difficulties confronting transfer pricing researchers is the confidential nature of the information. Ferreira and Merchant (1992) also highlight the shortcomings of surveys, and in consideration of the publicly unavailable and sensitive nature of the transfer pricing data, they suggest the use of one-to-one interview to reduce response bias.

Grabski (1985) reviews works on transfer pricing between 1974 and 1983 and concludes that empirical works constitute a small proportion of transfer pricing literature with the vast majority (over 80 percent) being analytical. Consequently, for the present research, data are collected from both corporate management level and divisional level with each group answering relevant questions.

For example, general company-level information and strategy-related questions are typically directed to corporate management while operational questions relating to the day-to-day implementation of transfer pricing are directed to divisional management. Furthermore, in consideration of the complexity of the transfer pricing problem and reducing response bias, a combination of interview and questionnaires is employed.

2.1.6.8. Transfer pricing service industries

Traditionally management accounting systems were developed for goods because services have traditionally been seen as a small part of the total problem solution offered to customers. In the accounting literature, despite a multitude of studies that examined goods, only a few studies investigated transfer pricing in services. These studies are summarised in Table 2.5.

Table 2.5

Prior studies on transfer pricing in service industries

Tyler and Fridholm (1975)	Transfer pricing in bank funds
Lucien (1979)	Transfer pricing in banking (article)
Owens (1982)	Transfer pricing of services in public service
Tewes (1976)	Transfer pricing in funds allocations (article)
Drury (1994)	Transfer pricing practices of ten building societies in the U.K.

Lucien (1979) looks at the transfer pricing of cost of funds in a commercial bank and recommends the use of ‘maturity-based system’ which calls for charging funds according to the length of time they are used or supplied. Owens (1982) investigates transfer pricing in the public service from an internal auditing point of view and suggests that the pricing policy should be fair to the manager of the buying division and a policy for transferring of goods and services should be in the best interest of the company and should maximise resource capabilities of top management.

Tewes (1976) examines transfer pricing of funds in commercial banks and suggests that the application of any transfer pricing system to bank decision-making should be tailored to the purpose and result desired from the analysis.

Tewes (1976) also claims that under a marginal cost approach, the true economic impact of a current decision becomes apparent. Howel and Soucy (1990) indicate that services become a more significant part of companies' competitive advantage and cost structure and, therefore, management must respond. Transfer pricing in service organisations is complex and challenging. Historically, services are transferred at cost or at a mandated market price equivalent to standard cost plus mark-up (Keegan and Howard, 1988).

Berry and Yadav (1996) identify some of the key characteristics of services as they relate to costing, as follows: (a) almost all costs are period costs; (b) measurement of output is difficult; (c) service organisations are direct labour-intensive; and (d) there are no finished goods inventories.

Keegan and Howard (1988) report a Price Waterhouse Coopers survey conducted in the US in 1987 covering the 148 largest industrial organisations, which found that 72% of the respondent companies used negotiated transfer prices for service transfers owing to the difficulties encountered in measuring the value. Likewise, standard costs are also hard to apply because some service activities are unique or customised. Value-added transfer pricing flows from strategy and is grounded in appropriate procedures that fit the business. Transfer pricing in service organisations is complex and challenging. Historically services are transferred at cost or at a mandated market price equivalent to standard cost plus mark-up (Keegan and Howard, 1988).

Cooper and Slagmulder (1998) argue that many firms allocate support costs to the operating divisions using a 'peanut butter' approach that spreads these costs in arbitrary ways. This arbitrary approach leads to low accuracy and zero transparency for these costs which then give rise to dissatisfaction and often bloated central services because the operating units are unable to discipline central services adequately.

Elwood (1996) examines whether full cost pricing can facilitate the achievement of productive efficiency in the National Health Service (UK) internal market, and concludes that accurate costing of health care services is complex and the internal market consists of oligopolies and oligopsonies. In addition, rigid full-cost-based pricing is not compatible with the perceptions and incentives at the provider level. Cost-based pricing strategies involve several limitations as they do not: (1) consider demand and supply; (2) maximise profits; and (3) incorporate unique service characteristics and selling conditions into the decisions (Hoffman and Arnold, 1989). Transferring services at actual full cost results in further problems of passing the costs of inefficiencies of supplying division to buying division.

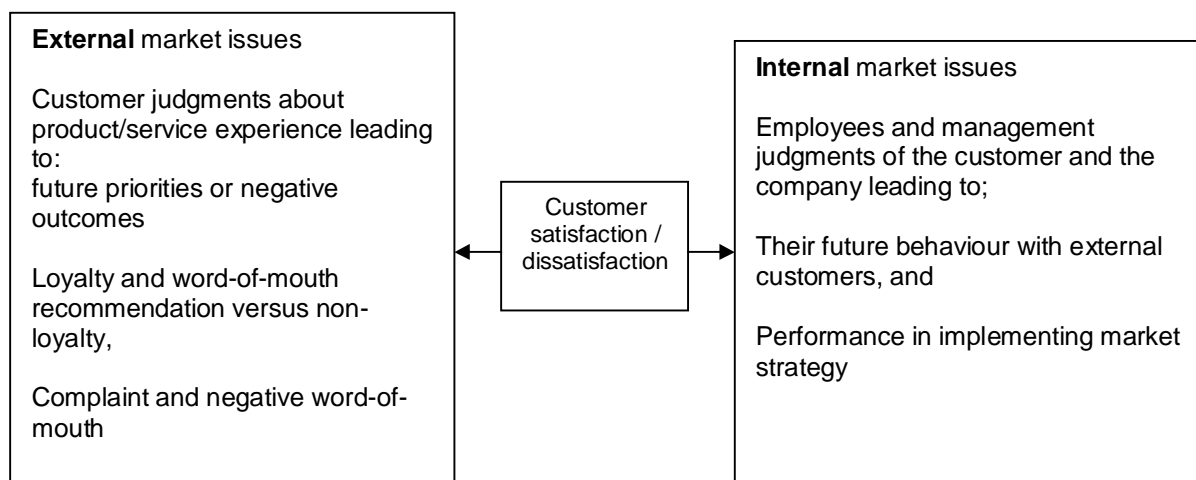
Actual full costs are calculated by dividing all fixed and variable expenses for a period into the number of units produced. Use of actual full costs also allows the supplying division to recover its costs without too much effort, and consequently there is hardly any incentive left for the supplying division to improve efficiency and reduce cost levels. In contrast, Sahay (2003) claims that a transfer pricing policy based on actual costs is usually easy to implement, and is a natural choice, especially where a market price is not readily available for the intermediate good or service. Sahay's conclusion is based on the premise that a positive mark-up is desirable because it motivates the seller to reduce costs by undertaking specific investments, and the value to the firm from such investments more than offsets the cost of the mark-up in the form of reduced levels of internal transfers. In internal transactions, it is not known to what extent the internal price affects buying decisions.

2.2. External markets and internal markets

Firms face two kinds of markets and customers: internal markets and external markets (Piercy, 1995; Emmanuel and Mehafdi, 1994) and hence two kinds of customers: external customers and internal customers. In the customer satisfaction context, Berry and Parasuraman (1991) distinguish between external market and internal market issues as follows (Figure 2.1).

Figure 2.1.

External Markets versus Internal Markets (Berry and Parasuraman, 1991)



Piercy and Morgan, 1991 divide internal markets into distinct internal market segments with different needs and wants. Davis (2001) suggests that most departments have a captive market for their services, and therefore there is little incentive to try harder. He adds that these internal relationships can be described as 'internal market monopolies', and as a consequence of this many line managers have learned to expect mediocre internal service.

The above model suggests that external market requirements and conditions determine internal market structure and issues. Cooper and Slagmulder (1998) recommend extension of the scope of cost management systems to internal markets so as to maintain competitiveness. They claim that as each operating division becomes more efficient and customer-focused, the end customer will be served better.

Based on their role on the value chain, Brooks, Lings and Botschen (1999) distinguish between two internal market segments in a firm: (1) the direct internal market that consists of interactions between adjacent departments with value-adding functions; and (2) the indirect internal market that is made up of divisions with a support function.

The current research focuses on internal markets and internal customers. The internal market within an organisation can be likened to the business-to-business environment as opposed to the business-to-consumer setting, because internal buyers are employees involved in internal exchange of goods and services are professionals with reasonable knowledge of the items or services they procure. Also, those purchases are not intended for personal use or consumption. Based on their study of a single case, Brooks, Lings and Botschen (1999) find that internal customers involved in the direct creation of value for the external customer use different service quality dimensions to those used by support functions. It is also established that the internal customers who are not in contact with the external customer show low levels of service quality and no increase in expectations.

This finding contrasts with some authors' (i.e., Gronroos, 1985; George, 1990; Wilson, 1994) conclusions which stress improving service quality by concentrating on customer facing staff only.

In some cases, internal suppliers compete with each other or with external suppliers. Drucker (1985) observes that competition within corporations is much more intense than competition between them, and is a lot less ethical. Moreover, corporate units often have more cooperative relationships with their external suppliers than with their internal sources of goods and services. From a resource allocation point of view, some internal markets allocate resources based on administrative decisions, some on market prices and some on a mixture of the two. It is not known if divisions using internal services are concerned about the value they receive vis-à-vis costs to the company, especially where the costs of some support activities, such as accounting, legal services and human resources are allocated by management.

The concept of “internal customer” was first introduced in the late 1970s and early 1980s by Berry (1981) and Gronroos (1981). Initially, the proposition aimed at motivating employees of the organisation to examine their own roles and adopt a customer-consciousness and improve external customer satisfaction through positive employee-customer interaction (Quester and Kelly, 1999).

Denton (1991) calls internal customer as ‘next operation as a customer’ suggesting that each group within the company should treat the recipients of their output as an internal customer and strive to provide high quality outputs for them. Denton’s (1991) ‘horizontal management theory’ calls for external customer’s specifications to pass through internal customers to internal suppliers and eventually to the external supplier. However, treating employees as customers still proves to be a controversial topic. It is important that a distinction is made between internal customer service and internal marketing.

Internal customer service involves employees serving each other; usually during the exchange process between employees in different functions. Internal marketing, on the other hand, focuses on how a firm serves the employees (Berry 1981; Gronroos, 1981). Internal services are described by Stauss (1995) as ‘services provided by distinct organisational units or the people working in these departments to other units or employees within the organisation’.

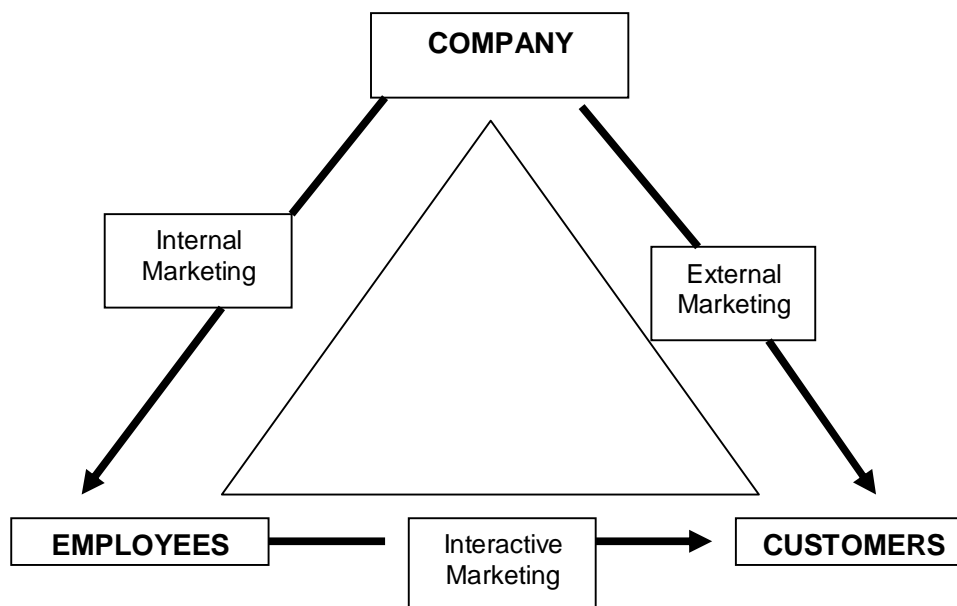
External customers, typically, are free to acquire their requirements from any source they choose; some internal customers are restricted in their purchasing. Also most internal customers are paid professionals who are reasonably knowledgeable about the services they acquire. As Albrecht (1990) and Berry (1995) report, much effort has been devoted to examining the service quality needs of external customers. There has been very little effort to understand the requirements of internal customers. Sasser (1976) points out that the successful service company must first sell the job to employees before it can sell its services to external customers.

Sasser's (1976) view was supported by Greene, Walls and Schrest (1994) who regard employees as internal customers and jobs as internal products and argue that by satisfying the needs of internal customers, an organisation upgrades its capability for satisfying the needs of its external customers. Lewis and Gabrielsen (1998) study financial services in Norway and find that 43 percent of employees disagree that their bank is concerned with enhancing cooperation and communication among divisions, and 53 percent disagree that the internal units understand and are concerned with the customers' needs.

Gronroos (1985) extends his original definition of internal marketing to include motivating employees to customer consciousness, market orientation and sales mindedness by adopting a marketing-like approach in internal transactions. Internal marketing is important to all industries, but that it is extremely important to the service industry (Greene, Walls and Schrest, 1994). Gronroos (1984) argues that service marketing requires not only external marketing, but also internal marketing and interactive marketing (Figure 2.2.).

Figure 2.2

The Services Marketing Triangle **Source: Gronroos (1984)**



All three sides of the triangle are essential to complete the whole, and the sides of the triangle should be aligned. That is, what is promised through external marketing should be the same as is delivered; and the enabling activities inside the organisation should be aligned with what is expected of service providers (Gronroos, 1984). Kanji and Asher (1993) argue that the role of the employee must be expanded to that of 'internal customer', and objectives of delivering quality results and satisfying customers should apply to internal customers as well external customers. In a quality context, Johnson (1993) regards accomplishment of internal working relations as a precondition for the satisfaction of external customers.

Piercy and Morgan (1991) establish that external customer satisfaction is both dependent on and a contributor to internal customer satisfaction, and view internal marketing as a complementary function of the external marketing effort. Inter-departmental relationships should be viewed as one of the most important interfaces within the entire supply chain (Handfield and Nichols, 1999). Service requirements of internal and external customers also differ. Attainment of sustainable excellent external customer support calls for internal systems that are aligned to serve the external customer with each internal sub-system adding value to others within the organisation who are dependent on it as though the other sub-systems were its customers (Deming, 1986).

2.2.1. External customers and internal customers

Most activities have internal customers which are downstream activities, with their own requirements that have to be satisfied if the whole system is going to prosper (Day, 1990). Moreover, Adamson (1988) and Davis (1991) highlight the importance of the internal support functions as the key link to the external customer satisfaction. Using the case study method, Farner, Luthans and Sommer (2001) analyse the association between internal service quality and external quality in a large food and grocery wholesaler in the USA.

They concur that although internal service quality is important, internal service quality does not lead to external customer satisfaction, which indicates that more empirical studies should be conducted to understand the internal service concept.

2.2.2. Arguments about the internal customer concept

No consensus exists on whether satisfaction of internal customers is equally important as the satisfaction of external customers. One of the prominent opponents of the internal customer concept is Harari (1991) who argues that an organisation's health is dependent on how well the paying external customer is serviced, and that there is so much happening externally that there is simply no time to spend worrying about internal customers. According to Harari (1991) there are no internal customers, there are just customers, and pooling everyone's talent towards meeting their needs will not only create a leaner, more efficient organisation but one whose potential is, to quote one executive; 'damn near infinite'. Therefore, he suggests that everybody's focus should be directed to the external customer as internal satisfaction is irrelevant to the goals of the organisation.

The literature highlights the fact that while businesses have focused heavily on external customers, they have overlooked their internal customers. To date considerable research has focused on the satisfaction and provision of service quality to external customers (Parasuraman, Zeithaml and Berry, 1988; Zeithaml, Parasuraman and Berry, 1990; Fisk, Brown and Bitner, 1993; Taylor, 1994; Nicholls, Gilbert, and Roslow, 1998). The emergence of the concepts of internal customers and internal marketing in the literature dates back to the early 1980s (Gronroos, 1978, 1981, 1995; Berry, 1981). External customers typically compare the perceived value of competitive offerings. In internal markets, some divisions have complete freedom to out-source from external sources of supply, customer perceived value may be important for acquisition decisions; however, in cases where no such freedom exists it is not known if customer perceived value is considered.

2.2.3. Association between satisfaction of internal customers and external customers

It is important to draw linkages between what is being delivered internally and how it supports the delivery of the final service to customers (Zeithaml and Bitner, 2003). Internal customer orientation is deemed crucial for the satisfaction of the external customers (Albrecht, 1990; Lusch, Brown and Brunswick, 1992; Berry, 1995; Cespedes, 1995), and further systematic studies in this area are recommended. While George (1990) regards effective internal exchanges as a prerequisite for successful exchanges with the external market, Pfau, Dentzal and Geller (1991) highlight that lack of attention to internal supplier and customer relationships might adversely affect external customer satisfaction.

It is imperative to achieve good internal working conditions in order to be able to satisfy external customers, and every person in an organisation must be made to realise that they have internal customers who must be satisfied (Johnson, 1993). According to Gronroos (1981), an important part of internal exchange is the way in which organisational units provide service to their internal customers with divisions and individuals being responsible for the provision of high level of service quality to their internal customers. The rationale is the same when providing service to external customers where firms strive for better performance, lower costs and other benefits of value to the customer. An organisation's ability to satisfy the needs of its internal customers can influence its ability to satisfy external customers (Hogg, Carter and Dunne, 1998; Schlesinger and Heskett, 1991). Previous studies provide evidence of a positive correlation between internal service quality and external service quality (Schneider and Bowen, 1985; Schlesinger and Heskett, 1991) with the failure to meet the needs and expectations of internal customers resulting in a poor quality product (Varey, 1995; Evans and Lindsay, 2002).

Bowen (1990) establishes an association between internal market outcomes (such as satisfied employees) and external market outcomes (such as enhanced external customer satisfaction and perception).

Denton's (1991) horizontal management theory calls for transfer of external customer's specifications to internal customers to internal suppliers and eventually to the external supplier. Denton's horizontal management model is in accord with Porter's (1985) value chain model where internal value adding functions are so organised that value is added as activities are performed along the value chain.

Current conceptualisations of internal marketing which focus on internal customers and suppliers have not differentiated between the different types of internal customers which may exist within the firm and their differing internal service expectations. As a consequence of this, internal marketing efforts aimed at increasing internal service quality have not specifically targeted internal customers but have been undifferentiated and aimed at all internal customer groups.

There is a need to explore the service expectations of different internal customer segments within the internal market and identify any differences between these segments (Lings, 2000). In this study, the internal customer concept is not restricted to the satisfaction of employees but is expanded to encompass satisfaction of sub-divisions in the inter-divisional service transactions.

2.3. Value

There is a link between service quality and satisfaction (Cronin and Taylor, 1992; Oliver, 1993) but value is a rather neglected aspect in the discussion of customers' evaluation of services (Caruana, Money and Berhton, 2000). There are problems in providing a definition of value on which many people may agree. This confusion is attributable to the subjectivity of value (Hardy, 1987), variations between customers (Wikstrom and Normann, 1994), variations within customers (Parasuraman, 1997), between cultures (Assael, 1995), in different situations (Ravald and Gronroos, 1996), pre-purchase and post-purchase (Gardial *et al.*, 1994) and between tangible and intangible offerings (Naumann, 1995).

For Porter (1985) value is 'what buyers are willing to pay'. As noted by Leszinski and Marn (1995), the term value is probably one of the most overused and misused terms in marketing and pricing literature. In consumer behaviour literature, reference is made to mental images or cognitive representations underlying consumers' needs and goals (Peter and Olson, 1983) or as a set of shared beliefs or norms of what is desirable, influencing individual attitudes and subsequent behaviour (Durgee, O'Connor and Veryzer, 1996). While Buzzell and Gale (1987) describe value as the relationship between quality and price by stating that a customer who gets superior quality at a low price gets better value; a customer who gets inferior quality at a high price gets worse value.

The value that customers deliver to organisations is essentially profits generated from a customer over their lifetime with the organisation (Reichheld and Sasser, 1990). This research takes the latter concept further to examine whether intra-organisational transactions in service organisations deliver value to internal customers. Marketing literature views value from the perspective of the seller or provider of services, that is to say, the focus is on how much value each customer creates for the supplier. Woodruff (1997) distinguishes between two types of value: (1) the value that a customer represents to the firm –that is to the value of the customer to the company; and (2) the perceived value that an external customer receives from the company.

The value that a customer delivers to the organisation (Grewal, Monroe and Krishnan, 1998) draws more academic interest than the value the organisation delivers to customers (Gronroos, 1997). In the services industry, some major studies on external customers' perceptions include Bick, Brown and Abratt (2004) who investigate expectations and perceptions of retail bank customers in South Africa. Boyd, Leonard and White (1994) examine the relative importance attached to the selection criteria employed by UK households in choosing among financial institutions. The major traditional pricing methods (cost-based, probability-based and demand-based) remain prevalent today.

However, in the light of changing demand for higher service levels, the organisations are suggested to adopt value-based pricing strategies (Bingham and Raffield, 1990) and perceived value-pricing is claimed to result in reduced risk in price decisions (Morris and Calantone, 1990)

2.3.1. Value from the internal customer's perspective

For the purposes of this research, value is defined as the things that are important for the internal customer's perception of what they receive. One disadvantage of this approach is the narrow focus on internal processes at the expense of external factors and concentrating on customer needs which are only one group of needs amongst inter-connected stakeholders. Price reflects a product's strengths and weaknesses, its value, competitive positioning and distribution power (Corey, 1982).

For internal value generation, it is important that managers know what type of value their internal customers look for. Understanding what buyers value within a given offering, creating value for them and then managing it over time have long been recognised as essential elements of every market-oriented firm's core business strategy (Drucker, 1985; Porter, 1985; Slater and Narver, 1998).

Determining what the customer wants in a service also helps a firm to formulate a clear statement of its “value proposition”, i.e., the communication of the unique benefits and utility obtainable only from the focal product in contrast to those from its competitors. Customer perceived value represents the value as perceived by customers rather than objectively determined by the seller (Woodruff, 1997).

According to Zeithaml (1988) customers define value in four ways: (1) Value is low price; (2) Value is whatever I want in a product or service; (3) Value is the quality I get for the price I pay; and (4) Value is what I get for what I give. She then develops a definition of customer perceived value that encapsulates the four expressions indicated in the previous sentence and concludes that the perceived value is the consumer’s overall assessment of the utility of a service based on perceptions of what is received and what is given. Customer value means the emotional bond established between a customer and a producer after the customer has used a salient product or service produced by that supplier and found the product to provide an added value (Butz and Goodstein, 1996).

Zeithaml (1988) views value as a trade-off between the relative ‘gives’ and ‘gets’, and defines perceived value as the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given. Several other authors (Thaler, 1985; Monroe, 1990; Gale, 1994; Grewal, Monroe and Krishnan, 1998) also stress two central components of customer perceived value: (1) acquisition value – that is, perceived net gains associated with the products or services acquired; and (2) perceived transaction value – the perception of psychological satisfaction or pleasure obtained from taking advantage of the financial terms of the price deal.

In the Service Profit Chain Model developed by Heskett and Schlesinger (1994), customer value is defined as the value perceived by the (*external*) customer – relative to expectations. High customer value as delivered by one service organisation, therefore, could be very different from high customer value delivered by a firm performing a similar service positioned to appeal to a different type of customer (different either demographically or psychographically).

2.3.2. Dimensions of value

Dimensions of value drawn from the literature are discussed in the following paragraphs.

2.3.2.1. Benefits

Benefits include both measurable and non-measurable components. Although what is received varies across consumers (i.e., some may want volume, others high quality or convenience) and what is given also varies (i.e., some are concerned only with money expended while others are concerned about time and effort), value represents a trade-off of the salient give and get components. Lovelock, Patterson and Walker (2001) use the term 'net value' which they describe as "the sum of all benefits (gross value) less the sum of all the perceived costs".

For customers, value means benefits received for the burdens endured (Berry and Yadav, 1996). For a service, quality has been identified as the salient 'get' characteristic (Heskett *et al.*, 1994) while the sacrifice made to acquire or consume has been identified as the relevant 'give' component (Drew and Bolton, 1987). In contrast, some researchers define customer perceived value only in terms of benefits (Hunt and Morgan, 1995; Hamel and Prahalad, 1994). Zeithaml (1988) view direct monetary cost (price) as only one component of what consumers give up or sacrifice to obtain a service.

Bick, Brown and Abratt (2004) investigate the perception and expectations of banking customers regarding the value delivered to them by retail banks in South Africa and find that external customers do not perceive any differences between the values offered by the four retail banks. Chang and Wildt (1994) and Sinha and DeSarbo (1998) establish a positive correlation between perceived value and quality, and a negative correlation between perceived value and price. Thus the value is defined as: $SV = f(SQ, SAC)$ where: SV=service value, SQ: Service quality, SAC=Sacrifice.

2.3.2.2. Sacrifices

Sacrifice represents the relative 'give' component of value formulation and it is a broader and richer construct which includes such non-pecuniary costs as the time, effort and risk assumption associated with a particular purchase. While the most obvious factor is the price of the service offering, sacrifice appears to be perceived by individuals as involving both monetary attributes and such non-monetary factors as time and effort (Zeithaml, 1988).

Time represents a sacrifice (cost) item for most services consume time in the form of time needed to access and use the service, time saved or lost relative to alternative services, and time horizon within which benefits can be derived from the service. For example, Lovelock, Patterson and Walker (2001) argue that, among other things, a marketer can increase the net value of a service by reducing the amount of time involved in service purchase, delivery and consumption, and by minimising unwanted mental effort or psychological stress in obtaining the service or pruning any unwanted physical effort that customers must make to obtain the service.

Monetary sacrifice refers to price which is a quantified component of what the customers give up or sacrifice (Rust, Zeithaml and Lemon, 2004). Because it is quantifiable, price has a direct value-decreasing impact. Although price seems to be a key factor that affects value, contribution to or place of price in the value equation is not known. This is precisely what this research is attempting to investigate in internal markets. Customers' perceptions of value are influenced by price, quality, image and service quality (Naumann, 1995). Peterson and Wilson (1985) suggest the inclusion of perceived risk in the quality/sacrifice trade-off because risk is an inherent part of the cost of the acquisition and use of any physical good or service.

Owing to their intangibility and, and difficulties in evaluating prior to purchase, most service acquisitions involve risk of emergence of undesirable consequences such as late deliveries, service failures, unforeseen costs. Therefore, reduced perceived risk may result in increased value for the customer. Another factor that adds risk to the service purchasing decision is services' non-returnability.

In addition, recovery from mistakes in delivery of services is more difficult. Groth (1995) stresses opportunities that can be exploited to influence customers towards developing favourable impressions of service value, and therefore minimise the risk associated with service delivery. Service Level Agreements (SLA) – contracts between service provider and customer – provide protection for the customer against perceived risks that might emanate from a service transaction.

Psychic cost refers to factors that influence the customer's perception of value favourably and reduce the risk of service value. The effects of psychic factors in the pricing of services are crucial (Groth, 1995). Psychic (psychological) costs are viewed as sacrifice and include interaction-related costs such as bilateral communication, bargaining and negotiation (Gronroos, 1998; Claycomb and Franwick, 1997) or conflict, frustration and anxiety (Dwyer, Schurr and Oh, 1987). According to Groth (1995), the effects of psychic factors in the pricing of services are crucial. Sacrifice is thus operationalised as a composite of perceived monetary price, perceived non-monetary price and perceived risk.

2.3.3. Expression of Value

In the literature, value is expressed in the following forms: ratio, subtraction, addition and multiplication.

2.3.3.1. Ratio

Some researchers (Drew and Bolton, 1987; Heskett *et al.*, 1994; Zeithaml, 1988) treated service value as a “ratio” with service quality as the numerator and sacrifice as denominator, such as: $SV = SQ/SAC$ or $SV = SQ \times 1/SAC$. Monroe (1990) used a slightly changed ratio or proportional specification, i.e., $Value = Quality / Price$ implying the perceived value is judged to be quality at unit price in buyers’ minds. Christopher (1996) proposes a value equation used in the supply chain context - Customer value = Perception of benefits / Total cost of ownership.

Heskett *et al.* (1997) suggested that the value of goods and services delivered to customers is equal to the results created for them as well as the quality of processes used to deliver the results all in relation to the price of a service to the customer and other costs incurred by the customer in acquiring the service. Heskett, Sasser and Schlesinger’s (1997) value equation may be expressed as follows:

$$Value = \frac{\text{Results produced for the customer} + \text{Process quality}}{\text{Price to the customer} + \text{Costs of acquiring the service}}$$

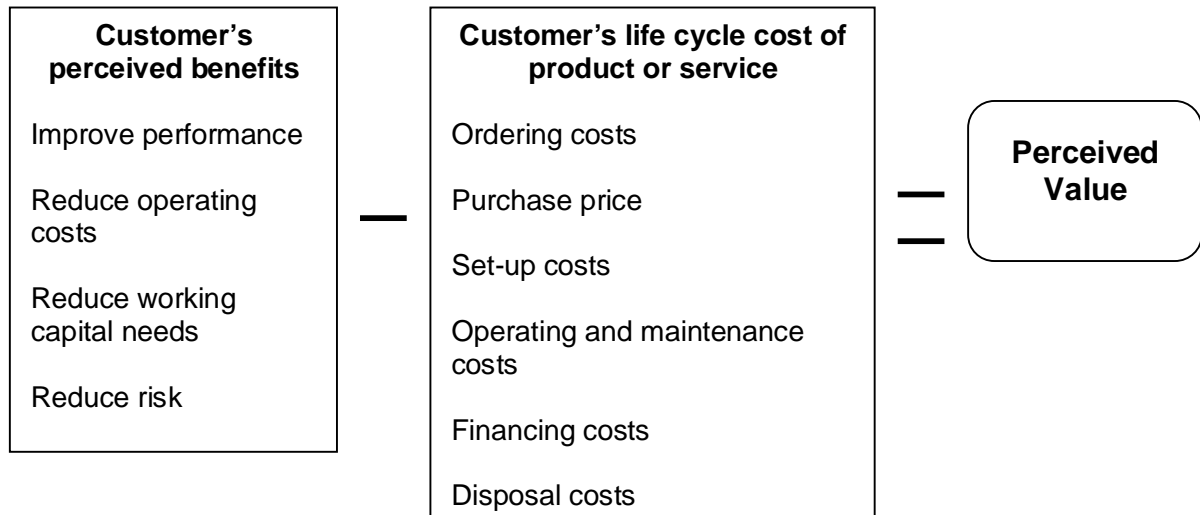
Similarly, Ho and Cheng (1999) conceptualise value as function (performance) divided by cost.

2.3.3.2. Subtraction

Hagerty (1978) and Levin and Johnson (1984) chose to use a “subtractive” formation, i.e., $Value = Quality - Price$. Lovelock, Patterson and Walker (2001) express value as the difference between the perceived benefits (core and supplementary) and the perceived costs (monetary and non-monetary, such as search, effort, location, convenience, social, confidence, and special treatment benefits and waiting time). Day (1990) offers a more encompassing equation given below: Customer Value = Customer’s perceived benefits – customer’s perceived costs (Figure 2.3).

Figure 2.3.

The perceived value model (adapted from Day, 1990)



It is, however, important to note that Day's (1990) model is based on industrial goods and industrial customers and, hence, is more applicable to business-to-business settings.

2.3.3.3. Addition

This 'additive' alternative to the multiplicative models advanced in the literature (Drew and Bolton, 1987; Heskett *et al.*, 1994; Zeithaml, 1988) is also suggested by Onkvist and Shaw (1987) and Bolton and Drew (1991). Like the multiplicative model, this second type of model also treats value as a trade-off between "give" and "get" components. The difference is that the trade-off is modeled as an additive rather than a multiplicative function. The alternative model is illustrated by the following equation: $SV = SQ + SAC$. This equation describes service value as a compensatory trade-off, so this model could be termed the 'compensatory model'.

2.3.3.4. Multiplication

Bolton and Drew (1991) question whether consumers' internal cognitions involve such complex mathematical processes as multiplication and suggest instead that addition appears to be a much more natural process. Cronin *et al.* (1997) lend support to the notion that consumers integrate the benefits and costs associated with the acquisition of the service in an additive manner.

In the literature there is disagreement on how to express the service value function. The conceptualisation of value in a multiplicative or divisive manner is inconsistent with the views of Evans (1991), Lynch (1985) and Thaler (1985).

Thaler (1985) blends cognitive psychology and microeconomic theory into a forceful defence of the position that consumers' mental accounting in choice situations involving goods or services defined by multiple attributes is based on the sum of acquisition and transaction utilities. Lynch (1985) similarly suggests that in consumer decision-making situations which involve multi-attribute evaluations, the information integration function is additive and thus one can properly model consumer decision on the basis of differences in the levels of the appropriate decision-making attributes (i.e., the difference between service quality and sacrifice perceptions in the case of service value assessments). Therefore, the information integration theory appears to lend considerable support to the notion that the process by which external consumers arrive at their assessment of the value of a service may be additive.

Although there are supporters of a multiplicative model (Drew and Bolton, 1987); Heskett *et al.*, 1994; Zeithaml, 1988) and additive model (Lynch, 1985; Onkvist and Shaw, 1987; Bolton and Drew, 1991), Thaler (1985) finds that in choice situations, a consumer performs multi-attribute evaluation based on the sum of acquisition and transaction. Lynch (1985) supports Thaler (1985) by asserting that consumer decision-making situations involve multi-attribute evaluations and the information integration function is additive. The assumption under models developed to date is that customers compare received value and with the costs incurred in acquisition prior to any purchase decision.

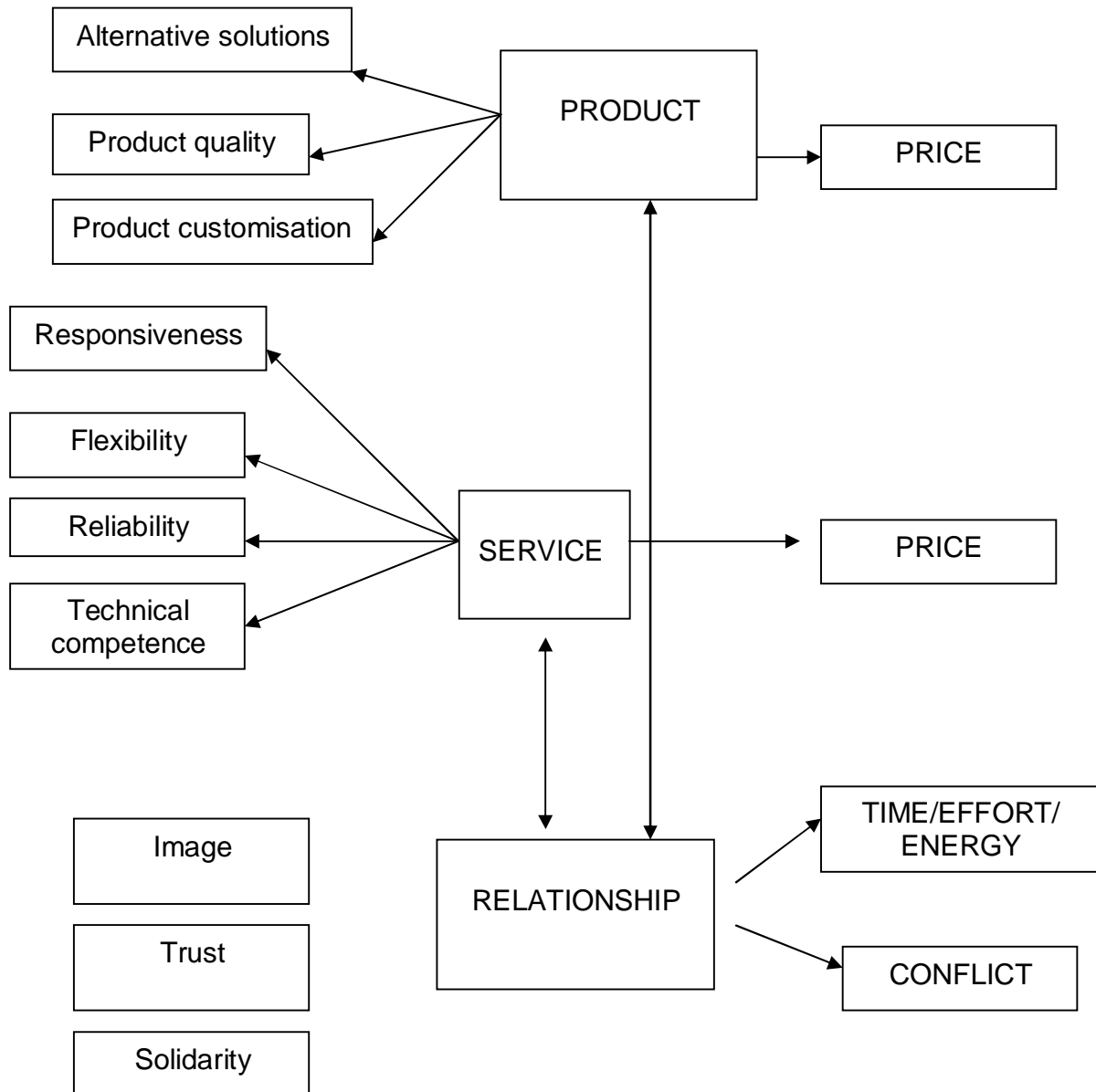
2.3.4. Measuring perceived value

From the point of view of achieving competitive advantage, an examination of the literature seems to suggest that both value and focus on internal customers are crucial for organisations. Measuring the value of customer relationship and how external customers value the total proposition has been identified as two of the highest priorities by the Marketing Science Institute for 1996-1998 (Lapierre, 2000). There is a need for more investigation about the development of a construct and conceptualisation of value, particularly in the fields of business-to-business marketing (Ulaga, 2001) and services (Hussain and Gunasekaran, 2001).

In order to identify perceived customer (*external*) value drivers in the three service sectors (information, distribution and finance), Lapierre (2000) conducts his longitudinal research in Canada. His findings lend support to Zeithaml's (1988) conclusion that customer perceived value is composed of two dimensions, namely, get (benefit) and give (sacrifice). Although Lapierre's (2000) study illustrated in Figure 2.4 relates to external customers' perceptions, the current research aims to use similar drivers as a basis in examining value creation in the internal customer context. According to Anderson and Narus (1995) many companies do not even know the cost of providing many of their services, and further, most companies rely solely on measures of customer satisfaction instead of assessing the value of their services.

Figure 2.4

First – order factor model for customer value (Lapierre, 2000)



After interviewing and surveying retail customers of appliance repair or maintenance, retail banking, long-distance telephone, securities brokerage and credit card services, Zeithaml, Berry and Parasuraman (1990) develop a 22-item SERVQUAL (service quality) instrument that represents one of the most widely used measures for service quality that measures service quality by comparing customer's expectations before the service delivery to customers' perceptions of the service quality after delivery. Zeithaml, Parasuraman and Berry's (1990) model identified five determinants for service quality: (1) reliability; (2) responsiveness; (3) empathy; (4) assurance; and (5) tangibles. SERVQUAL is designed to measure the difference between customers' perceptions of a service and their expectations of the service. SERVQUAL has been tested on external customers. Some researchers attempt to test whether the SERVQUAL dimensions also apply to internal service quality. Of the studies cited in Table 2.6, only Reynoso and Moore (1995) use the case- based approach (single case – a telecommunications company) while others use interview. It is noteworthy that only Reynoso and Moore (1995) and Kang, James and Alexandris (2002) perform reliability and validity tests of the construct, other researchers did not. Edvardsson, Larsson and Setterling (1997) make no reference to reliability and validity tests.

Table 2.6.**Previous research on applicability of SERVQUAL for measuring internal service quality**

Zeithaml, Parasuraman and Berry. (1985)	Chaston (1994)	Reynoso and Moore (1995)	Young and Varble (1997)	Edvardsson, Larsson and Setterlind (1997)	Brooks, Lings and Botschen (1999)	Kang, James and Alexandris (2002)
Tangibles	Yes	Yes	Yes	Yes	No	Yes
Reliability	Yes	Yes	Yes	Yes	Yes	Yes
Responsiveness	Yes	Yes (prompt)	Yes	Yes	Yes	Yes
Credibility	Yes (assurance)	Yes (Flexibility)	Yes (assurance)	Yes (assurance)	No	Yes
Security	No	Yes (confidentiality)	No	No	No	No
Competence	No	Yes (professionalism)	No	No	Yes	No
Courtesy	No	Yes (helpfulness)	No	No	Yes	No
Communication (empathy)	Yes	Yes	Yes	Yes	Yes	Yes
Understanding the customer	No	Yes (consideration)	No	No	Yes	No
Access	Yes	Yes (preparedness)	No	No	Yes	No
	Proactive decision making				Attention to detail	
					Leadership	

With a view to determine if the dimensions of service quality identified by Parasuraman, Zeithaml and Berry (1985) are also applicable to internal customers, using a single case, Brooks, Lings and Botschen (1999) investigate dimensions of service quality in the context of internal supplier and customer and find that two dimensions identified by Zeithaml *et al.* (1990) for external customers, namely, tangibles and security- are not relevant for internal customers. Brooks, Lings and Botschen (1999) introduce three additional dimensions that they find to be important: pro-active decision making; attention to detail; and leadership. Because Brooks, Lings and Botschen's (1999) findings are based on a single case study, this is considered a serious limitation, and as a result Parasuraman *et al.*'s (1985) dimensions are adopted.

Gale (1994) argues that the SERVQUAL technique developed by Zeithaml, Parasuraman and Berry (1990) can cause confusion in an organisation that is trying to manage customer value in a strategic way because the actual service dimensions on which customers make their decisions are not fully captured in the "empathy, assurance, responsiveness, reliability, tangibles" framework. Therefore, Gale (1994) suggests that it is better to find out the purchasers' actual criteria (and the words they themselves use to describe them). Brown, Churchill and Peter (1993) question whether a scale to gauge service quality can be universally applicable across industries. Despite several criticisms, SERVQUAL remains one of the most widely used instruments for measuring service quality. Stafford, Stafford and Wells (1998) examine service quality and customer service satisfaction in the automotive insurance business using SERVQUAL and find that reliability is the most important dimension.

Leisen and Vance (2001) conduct a comparative study of service quality in telecommunications industry in Germany and USA and find that although the service quality proves to be important in both countries, ranking of importance of quality dimensions vary, i.e., while reliability is the only important dimension in the USA, reliability, responsiveness and empathy stand out as most important dimensions in Germany.

Most of the empirical work on customer value has been carried out in the U.S.A with the only published Australian empirical study on customer value conducted by Sweeny and Soutar (2001). They develop a 19-item construct called 'SERVPERF' which was designed to gauge customers' perceptions of the value of a consumer durable good at brand level. Sweeney and Soutar (2001) propose that perceived customer value is a function of four dimensions. These dimensions and components of each dimension are summarised in the Table 2.7.

Quality and emotional value were found to be more important in explaining perceptions. Although the SERVPERF construct was developed and tested using durable goods and based on data gathered from external customers (durable goods and car buyers), Sweeney and Soutar (2001) believe that the majority of the scale should be appropriate for a variety of contexts with only quality items needing adaptation for non-durable goods. Making reference to MacKay (1999) who states that a product's or service's appeal is an amalgam of rational and emotional factors, and that emotions play a part in every purchase decision and very few purchases are entirely emotional, Sweeney and Soutar (2001) demonstrate that emotional and social factors also played a role in customers' assessment of durable goods.

Table 2.7.**Dimensions of PERVAL (Sweeney and Soutar, 2001)**

QUALITY	EMOTIONAL	PRICE	SOCIAL
Consistent quality	Is the one that customer would enjoy	Reasonably priced	Would help customer to feel acceptable
Well made	Makes customers want to use it	Offers value for money	Would improve the way customer is perceived
Acceptable standard of quality	Is the one that customer feel relaxed about using	Is a good product for the price	Would make a good impression on other people
Level of workmanship	Would make the customer feel good	Would be economics	Would give its owner social approval
Durability	Would give the customer pleasure		
Consistent performance			

Using the survey method, Quester and Romaniuk (1997) investigate whether SERVPERF or SERVQUAL is a better measure of Australian advertisers' perceptions of their advertising agencies and find that both constructs perform equally. Without testing, it is not known to what extent these factors can be applicable for services. However, findings of this study provide valuable insights for constructs that can be employed for services. In effect, there are similarities with the dimensions used by Sweeney and Soutar (2001) and Zeithaml, Parasuraman and Berry (1990) who develop the SERVQUAL construct that captures service quality. As highlighted earlier, quality is perceived as a component of value. Therefore, similarities between the two constructs are expected. These similarities are summarised in Table 2.8.

Table 2.8.**A comparison of SERVQUAL and SERVPERF**

Sweeney and Soutar (2001)	Zeithaml, Parasuraman and Berry (1990)
Social value: enhancement of social self-concept	Understanding the customer Tangibles
Emotional value: the utility derived from the feelings or affective states that a product generates	Security
Functional value (price/value for money)	Reliability
Functional quality (performance/quality)	-

2.3.5. Significance of the customer perceived value

McNair, Polutnik and Silvi (2001, p.9) report that 'understanding what customers value, and why, has always been the foundation of a sound business'. Some companies base their pricing decisions on the product's perceived value. The buyer's perception of value and not the seller's level of cost is taken as the key to pricing (Bradley, 1995). Bradley's (1995) statement stands in contrast to prior research findings which indicate that basing prices on costs remains the most popular method. Porter (1985) argues that buyers seldom pay for value they do not perceive, no matter how real the unique extras may be. Heskett, Sasser and Schlesinger (1997) conclude that customers today are strongly value-oriented and seek results and service process quality that far exceeds the price and acquisition costs they incur for a service. The creation of superior customer value is a key element for companies' success (Higgins, 1998; Woodruff, 1997). According to Reichheld (1996), firms that deliver superior value secure loyal customers and, in turn, reap favourable firm-level outcomes in terms of higher revenues and less overhead costs.

What constitutes value appears to be highly personal, idiosyncratic and may vary widely from one customer to another (Holbrook, 1994; Zeithaml, 1988). Research evidence suggests that customers who perceive that they received value “for money” are more satisfied than customers who do not perceive they received ‘value for money’ (Zeithaml, 1988). Also perceived value may be used by consumers to bundle various aspects of the service relative to competitive offerings. That is, perceived value can be viewed as a relative measure of the costs and other monetary aspects of the service in comparison to competitors. The accounting aspect of customer-perceived value has received little attention.

2.3.6. Customer perceived value and service quality

Service quality and buying intentions are positively correlated (Cronin and Taylor, 1992; Parasuraman, Zeithaml and Berry, 1988). However, in external markets, service customers do not always choose to buy a service of the highest quality (Olhovsky, 1985), and do not always buy a service with the lowest cost (Onkvist and Shaw, 1987). McDougall and Levesque (2000) investigate the relationship between three elements (core service quality, relational service quality and perceived value) and customer satisfaction and future buying intentions, and found core service quality and perceived value to be the most important drivers of customer satisfaction. Heskett *et al.* (1994) found that internal service quality leads to employee satisfaction which, in turn, affects external customer value.

2.3.7. Customer perceived value and customer satisfaction

Empirical studies provide support that the perceived value leads to both customer satisfaction (Hallowell, 1996; Fornell *et al.*, 1996; Athanassopoulos, 2000) and future buying intentions (McDougall and Levesque, 2000). The literature investigating the relationship between value and its implications suggests that value leads to favourable outcomes (Chang and Wildt, 1994; Gale, 1994; Cronin *et al.*, 1997; Sweeny, Soutar and Johnson, 1999).

It is also noted that customer satisfaction is the direct link to favourable outcomes (Anderson, Fornell and Lehmann, 1994; Mohr and Bitner, 1995; Hallowell, 1996; Bolton and Lemon, 1999; Athanassopoulos, 2000).

Value is the dominant purchase motivation among consumers and institutional customers (Berry and Yadav, 1996). Customer value or customer-perceived value is concerned with the customer perspective which, in essence, is subjective. As Oliver (1996) points out customer-perceived value is recognised as a cognitive construct in contrast to satisfaction which is an affective construct. While satisfaction focuses on post-purchase perspective, customer perceived value can be considered as a pre-purchase or post-purchase construct (Woodruff and Gardial, 1996). Further, the satisfaction construct gauges present suppliers' offerings whereas customer perceived value considers both suppliers' and competitors' offerings in meeting customer's requirements. The added dimension of assessing competitors' offerings is crucial in ascertaining whether the value generation process contributes to competitive advantage.

It is accepted that satisfaction and customer value are distinct but yet complementary constructs. In business markets, the purchasing manager's decision making is mainly guided by cognitive factors rather than by affective factors. The association between price and value, particularly for services, is highlighted by Smith and Nagle (1994) who report that services pricing strategies might be derailed where no obvious association between price and value exists. Cressman (1999) also highlights that current information on how pricing decisions are made by organisations is far from complete specifically in relation to customer-value created. In the absence of empirical evidence, Emmanuel and Mehafdi (1994) argue that the satisfaction of the internal customer, especially when the transfer pricing decision is centralised or when an intermediate product market does not exist, is pivotal in shaping managerial behaviour and may have adverse effects on the value creation ability of the company. Companies are increasingly basing their prices on the customer's perceived value, therefore they must deliver the value promised and the customer must perceive this value (Kortge and Okonkwo, 1993).

2.4. Value chain analysis and competitive advantage

In this section, the literature pertinent to value chain analysis and competitive advantage is reviewed. The review focuses particularly on the role of internal transfers and domestic transfer pricing in the production of value and gaining competitive advantage.

2.4.1. Value Chain Analysis

The value chain developed by Porter (1985) views an organisation as a collection of activities that are performed to design, develop, market deliver and support its product with a view to delivering customer value. An organisation's value chain is composed of the linked set of value-creating activities that the organisation performs internally. Chenhall and Langfield-Smith's (1998) survey which covers 78 Australian manufacturers to investigate adoption and benefits of management accounting practices in Australia reveals that 49 percent of companies adopted value chain analysis. Compared to the adoption rate of other management accounting practices such as budgeting, benchmarking, performance evaluation, etc., 49 percent is classified as a low adoption level.

The value chain analysis enables a company to better understand which segments, distribution channels, price points, service product differentiation, selling propositions and which value chain configurations (such as linkages between activities and processes within and outside the company) will yield the greatest competitive advantage. The value chain analysis helps a company to assess competitive advantage through internal cost analysis (determining the sources of profitability and the relative cost positions of internal value creating activities) and internal differentiation analysis – understanding the sources of differentiation including the cost within internal value creating processes. A company's value chain and the manner in which it performs each activity reflect the evolution of its own particular business and internal operations, its strategy, the approaches it is using to execute its strategy, and the underlying economics of the activities themselves (Porter, 1985).

The costs incurred along the value chain are an integral part of the value creation process. The chain is viewed here as a process of translating end-user demands. George Cox, the Chief Executive of Unisys Information Services, states that “we not only have to understand our customers, we have to understand their customers” (Cox, 1997, p.27). Cox’s statement is consistent with the VCA which suggests that suppliers should understand how their offering fits in their customer’s value chain. Each activity along the chain is viewed as a potential source of competitive advantage (Porter, 1980; Lichtenhal, Wildon and Long, 1997; Woodruff, 1997; Parasuraman, 1997). The value generated by the supplying division may provide the buying division with a cost (or differentiation) advantage and, as a result, the buying division’s internal capability may be enhanced to compete successfully with external service providers.

According to Morrow (1992), understanding where the real value-creating activities are, and where the business differs in cost and value structures from principal competitors, provides the basis for determining what performance measures are needed and where measurement effort and information reporting should be focused. Consequently, the VCA serves as a useful framework for the purposes of the present research. The model is based on the premise that each activity performed generates value for the customer, which is also viewed as a source of competitive advantage (Lichtenhal, Wildon and Long, 1997; Woodruff, 1997; Parasuraman, 1997; Porter, 1980). When internal value chain activities are performed better than rivals, the factors that drive the costs of these activities must be managed effectively and efficiently. Hence, cost savings are pursued throughout the value chain. According to Porter (1985), a firm’s competitiveness is closely associated with its own value chain, the upstream value chain (value chains of its suppliers) and the downstream value chain (value chains of its channels of distribution). Suppliers incur costs in creating and delivering the inputs used in the firm’s value chain. The costs and quality of those inputs influence the firm’s ability to lower its costs and develop differentiation.

A firm can gain a competitive advantage either by performing all the activities within the value chain at a lower cumulative cost than those of its competitors (cost advantage) or by performing them in a way that leads to differentiation and a premium price (Porter, 1980; Hill and Jones, 2001). Shank and Govindarajan (1992) suggest the use of the value chain for strategic cost analysis. However, Emmanuel and Mehafdi (1994) question the utility of the existing value chain analysis model, arguing that it failed to address critical issues. They added that the value creation ability of the transferee is dependent on that of the transferor, and for this reason the transfer prices play a role in the value chain. Deming (1986) argues that internal systems should be aligned to service the external customer with each internal sub-system adding value to others within the company who are dependent on it as though the other systems were its customers.

2.4.2. Competitive advantage

Delivering offerings which comprise competitive bundle of benefits, or value, to the customer is seen as crucial to an organisation's ability to compete effectively in a particular market (Mathur, 1992; Czepiel, 1992). Customer value is one of the key sources of competitive advantage (Ravald and Gronroos, 1996; Woodruff, 1997; Parasuraman, 1997). Although the notion of competitive advantage is a relatively recent concept, it has drawn attention (particularly in the past two decades) as a result of a resurgence of academic and practitioner interest. The concept of competitive advantage was first introduced in the literature by Ansoff (1965) who reports that a competitive advantage results from the search for unique opportunities that provide firms with a strong competitive position. Ansoff (1965) further suggests that a firm needs to compete effectively. He nominated competitive advantage as one of the four strategy components to this end, but his contribution is confined to a brief reference to the concept. Delivering good customer value leads to higher customer loyalty and retention which then leads to higher market share, reduced operating costs, improved profitability and better stock market performance (Naumann, 1995).

Currently there are two main theories of competitive advantage: (1) Porter's (1985) description of competitive advantage focuses on external conditions such as product and market situation of the company; and (2) RBV, which emphasises internal processes and identifies key resources that may generate a competitive advantage. The Resource-Based View (RBV) of competitive advantage advanced by Barney (1991) and Prahalad and Hamel (1990). Peteraf (1993) suggests that the true source of competitive advantage lies in the resources and internal processes of the company rather than in the product or market related reasons. The Resource-Based View emphasises internal processes and identifies key resources that generate value.

2.4.2.1. Resource-Based View (RBV)

Seminal studies in RBV were performed by Barney (1991) and Wernerfelt (1984). According to the Resource-Based View, a firm has a competitive advantage when it possesses resources or skills that are unique and difficult to imitate and enable it to deliver customer value (Barney, 1991; Day and Wensley, 1988). Day and Wensley (1988) identify two sources of competitive advantage for a firm: superior skills (staff capability, know-how, systems, abilities or competencies) and superior physical resources (greater stocks of financial and other capital, better productive capacity, better location, operating scale, distribution system, brand equity, access to supply, etc.). Bharadwaj, Varadarajan and Fahy (1993) emphasise that superior skills do not automatically give a business a competitive advantage but they only provide the business an opportunity to leverage its skills and resources to achieve competitive cost and/or differentiation advantages.

The successful conversion of skills and resources into a unified set of competencies is the basis for a cost or differentiation strategy. According to RBV, firms seeking competitive advantage should accumulate resources and capabilities that are absent in other firms.

These resources must not be perfectly mobile: they must be resources that other firms cannot trade for, substitute other assets for or imitate (Dierickx and Cool, 1989). From a RBV, a firm can enjoy a competitive advantage by implementing a value-creating strategy not simultaneously implemented by large numbers of other firms (Barney, 1991). Firms can, for example, create value by combining and developing resources in ways that improve products or that lower costs (Peteraf, 1993). The RBV focuses on the enterprise, and the internal capability of the enterprise to accumulate resources and skills which may be deployed to firm specific advantages for value creation that are rare, non-substitutable and difficult to imitate. The knowledge, in particular, is regarded as a major component in competitive advantage.

2.4.2.2. Sources of competitive advantage

Porter (1980, 1985) argues that the source of competitive advantage is the value a firm is able to create for its buyers and proposes strategies to achieve competitive advantage. The ability of an organisation to outperform its rivals lies at the core of the notion of competitive advantage. The sources of competitive advantage are used to achieve one of the two positions of advantage: *low cost* or *differentiation*. The low cost competitor supposedly can produce and deliver the product or service at the lowest price with the advantage of margin and pricing flexibility this confers. Those unable to achieve the low cost position, must make the product or service bigger, smaller, faster, more colourful, of better quality, superior or in a wider range than other suppliers. In short, to compete successfully at best and survive at least, they must differentiate their offerings in ways that the customer values and is prepared to pay for. Differentiation entails perceiving a consistent difference in important attributes between the firm's offerings and its competitors' offerings. Porter (1985) stresses that these two strategies are mutually exclusive and that to attempt to be a low cost differentiator is to court the disaster of being stuck in the middle, that is to say, higher costs without real differentiation. Porter (1985) notes that competitive strategy is about deliberately choosing a different set of activities to deliver a unique mix of value.

Although Porter (1985) cautions firms to implement a low-cost or a differentiation strategy, several other authors (such as Baden-Fuller and Stopford, 1994; Thwaites, Walley and Foots, 1996) concur that today's competitive environment necessitates a simultaneous combination of cost and differentiation positions to achieve competitive advantage. The two generic strategies of low cost and differentiation proposed by Porter (1985) can indeed be followed simultaneously. Day (1990) argues that both generic routes maintain the same objective – to create superior customer value because regardless of which of these routes is emphasised, the effort will fail unless significant customer value is created. The discourse on competitive advantage is ambiguous as to whether it applies to firms or products. Porter's (1985) perspective focuses on the product and market conditions of the company rather than internal value creating processes where a real advantage may be generated.

2.4.2.3. Customer perceived-value and competitive advantage

As value lies at the heart of the concept of competitive advantage and given that the primary objective of most service organisations is to achieve customer satisfaction (Jones and Sasser, 1995) through providing value, organisations seek to understand what creates value for customers in order to build a competitive advantage (Lichtenhal, Wildon and Long, 1997). In addition, future buying intentions of customers are determined in part by perceived value (Bolton and Drew, 1991). Recent studies have indicated that value is one of the key criteria in buying decisions (Porter, 1985; Zeithaml Berry and Parasuraman, 1996; Woodruff, 1997). For a service to be preferred by customers, it must either be of lower relative cost or superior value (Day and Wensley, 1988).

This research is concerned with “customer value” which is considered to be a major tool to gain competitive advantage (Czepiel, 1992; Naumann, 1995; Parasuraman, 1997; Woodruff, 1997; Stahl *et al.*, 1999; Huber, Hermann and Morgan, 2001).

Coyne (1985) defines competitive advantage with reference to a key buying criterion. He states that “for a producer to enjoy competitive advantage in a product or market segment, the difference or differences between themselves and their competitors must be felt in the market place. That is, the difference must be reflected in some product delivery attribute that is a key buying criterion for the market”. An organisation has a competitive advantage when its capability exceeds that of the strongest competitor for a key buying criterion” (Coyne, 1985, p. 85). Customers typically seek value for the cost they incur and, therefore value is considered one of the key buying criteria (Porter, 1985; Zeithaml, 1988; Woodruff 1997). Transfer pricing methods which fail to recognise the competitive advantage that superior process technologies can provide and instead concentrate on short-term cost minimisation can severely undermine the firm’s ability to compete (Adler, 1996).

The need to achieve and sustain competitive advantage by providing customers with superior value has been stressed by several authors (Porter, 1985; Czepiel, 1992; Bowman and Faulkner, 1997; Lichtenhal *et al.*, 1997). Competitive advantage can be achieved by offering attributes and features that lower the buyer’s overall costs of using the product, lower the buyer’s labour costs, and boost the efficiency of the buyer’s processes, etc. Exploring the needs of customers (either external or internal) and the capability of the organisation to meet those needs can impact on the performance of both supplying and buying divisions.

2.4.2.4. Competitive advantage for service industries

Within the service industries, competitive advantage is less likely to come from tangible factors, and is more likely to be derived from intangibles that contribute to unique capabilities. Intangible assets are also important because they are increasingly considered in determining the market value of companies (Kaplan and Norton, 2001). Delivering superior value may have two performance outcomes: (1) customer satisfaction; and (2) superior sales growth.

According to Slater and Narver (2000) these two performance outcomes are incomplete indicators of competitive advantage because they do not explicitly consider economic value for the seller. Sales growth relative to key competitors is regarded as the best indicator of whether superior value is being created because a firm's sales will not increase faster than its competitors unless it is creating more value for customers than the competition. Organisations can sustain a competitive advantage only as long as the services they deliver and the manner, in which they deliver them, have attributes that correspond to the key buying criteria of their customers.

Therefore, it follows that competitive advantage achieved can be quickly lost with the fit between a firm's external environment and internal characteristics being crucial. For that reason, it is crucial for a supplier to create buyer value in ways unmatched by rivals.

2.4. Summary

The literature review presented in this chapter indicates that to date, the literature afforded relatively less attention to: (a) the implications of transfer pricing; (b) the satisfaction of needs of internal customer with respect to providing value; and (c) transfer pricing in the services industry.

The major gaps identified in this literature review as they apply to the current study are as follows:

- a. Very little empirical work is conducted on internal service quality and value (Kang, James and Alexandris, 2002; Woodruff, 1997).

Major focus in most of the prior empirical work on value (i.e., Parasuraman, Zeithaml and Berry, 1988; Grewal, Monroe and Krishnan, 1998) is on the value and service quality for external customers.

Transfer pricing process takes between two internal divisions, and the buying division is the internal customer. Therefore, analysis of whether internal customer receives value in the transfer pricing process remains unexplored. In addition, there is a lack of empirical studies in the field of transfer pricing (Grabski, 1985).

- b. Prior work focuses on the causes and methods of transfer pricing, not on the effects of transfer pricing (Borkowski, 1992).

As discussed in depth in section 2.1.6. hereof, the transfer pricing literature is replete with studies that aim to explore objectives of transfer pricing (i.e., Tang, 1979 and 1990), determinants of transfer pricing choice(i.e. Boyns, Edwards and Emmanuel, 1999), taxation in multinational transfer pricing, conflicts emanating from transfer pricing (Lawrence and Lorsch,,1967), transfer pricing practices (Tang, 1990, Drury et al., 1993), transfer pricing negotiation (Chan, 1998) transfer pricing strategy (Eccles, 1985; Spicer, 1988) and performance evaluation (Yunker, 1982).

- c. The relationship between perceived value and price requires further research (Simon, 1992; Slater and Narver, 1995; Smith and Nagle, 1994 and Zeithaml, 1988).

There are several studies that investigate the relationship between perceived value and service quality (i.e., Cronin and Taylor, 1992; Parasuraman, Zeithaml and Berry, 1988). Other researchers (i.e., Hallowell, 1996; Fornell et al., 1996, Cronin et al., 1997) investigated the relationship between (external) customer perceived value and customer satisfaction.

The association between the price, in this context the internal price, and perceived value (for internal customers) is yet to be researched.

- d. The association between transfer price and competitive advantage in the context of value chain has not been examined to date and merits further investigation (Mehafdi and Emmanuel, 1997; Emmanuel and Mehafdi, 1994). Value creation is a function of a firm's competitive advantage. As a component of value, the transfer price is indirectly linked to competitive advantage. Studies to date do not examine value in the context of transfer price. There is also no published study concerning the use of value chain analysis by service organizations.
- e. The mismatch between research questions and methodologies employed to investigate transfer pricing results in findings which provide insufficient insight on our understanding of transfer pricing.

As Colbert and Spicer (1995) and Mehafdi and Emmanuel (1997) point out, prior surveys gathered data at the firm level. However, transfer pricing occurs between divisions, therefore meaningful data can be obtained from the sub-unit level.

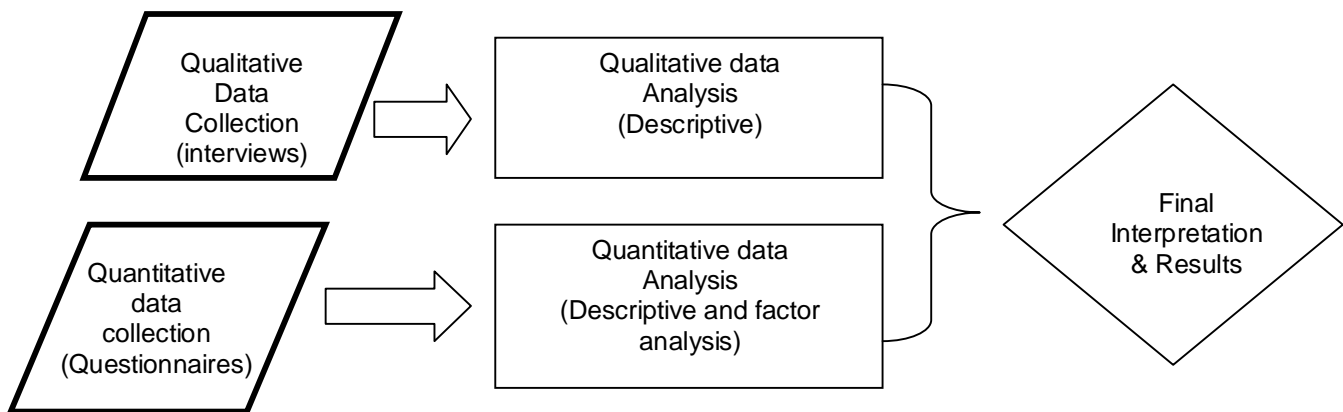
In consideration of the gaps identified in the literature, the purpose of this research is to understand and describe the domestic transfer pricing procedures and practices of service organisations in Australia and assess if domestic transfer price has bearing on the value that the internal customer perceives from an internal transaction.

In answering the research question, the study aims to investigate:

- a) What types of transfer pricing methods are employed by firms and what are the factors determining the design and implementation of transfer processes, including the setting of transfer prices?
- b) What are the reasons for the multiplicity of methods employed (if multiple transfer prices are used)? Do transfer price give rise to conflicts? If they do, what is the nature of such conflicts, and how are they resolved?
- c) What are the sources of competitive advantage for service businesses, and how are they sustained?
- d) What are the primary cost drivers?
- e) Which dimensions of value are perceived to be important for the internal buyer?

As shown in the following diagram, in carrying out this research, a concurrent nested strategy is adopted. Data gathered from interviews and data from questionnaires are analysed concurrently (Figure 2.5).

Figure 2.5. Research process



The research methods employed to investigate the research problem are outlined in the following chapter.

CHAPTER 3 – THEORETICAL FRAMEWORKS AND RESEARCH PHILOSOPHY AND METHODOLOGY

This Chapter begins with a discussion of underlying theoretical frameworks and research paradigms and research methodologies considered and the reasons that underlie the selection of the philosophical position and research methodology. The remainder of the chapter encompasses the description and rationale for sampling design, pilot study, data collection, data analysis, and selection of appropriate software package. Finally, the issues relative to ethical aspects and trustworthiness of the research are elaborated and strategies that are used to address the impact of potential factors that might undermine the reliability and validity of the findings are outlined.

3.1. Explanatory frameworks

There are three major frameworks explaining the nature of transfer pricing in organisations. The first framework is devised by Eccles (1985) who, based on 144 interviews with corporate and divisional managers, develops Manager's Analytical Plane (MAP). MAP views transfer price as a function of: (a) vertical integration strategy; and (b) diversification strategy. Internal contracting and agency relationships are of particular importance within a specific corporate structure and strategy lies at the heart of Eccles' work.

As shown in Table 3.1. the MAP emphasises processes as the crucial management variable and suggests that processes determine fairness and control, which, in turn, determine performance. Vertical integration and diversification are treated as two independent dimensions of strategy.

Table 3.1.**Manager's Analytical Plane (Eccles, 1985)**

Vertical Integration	Low Diversification	High Diversification
High	Cooperative Mandated full-cost	Collaborative Mandated market-based
Low	Collective No transfer pricing	Competitive Exchange autonomy market price

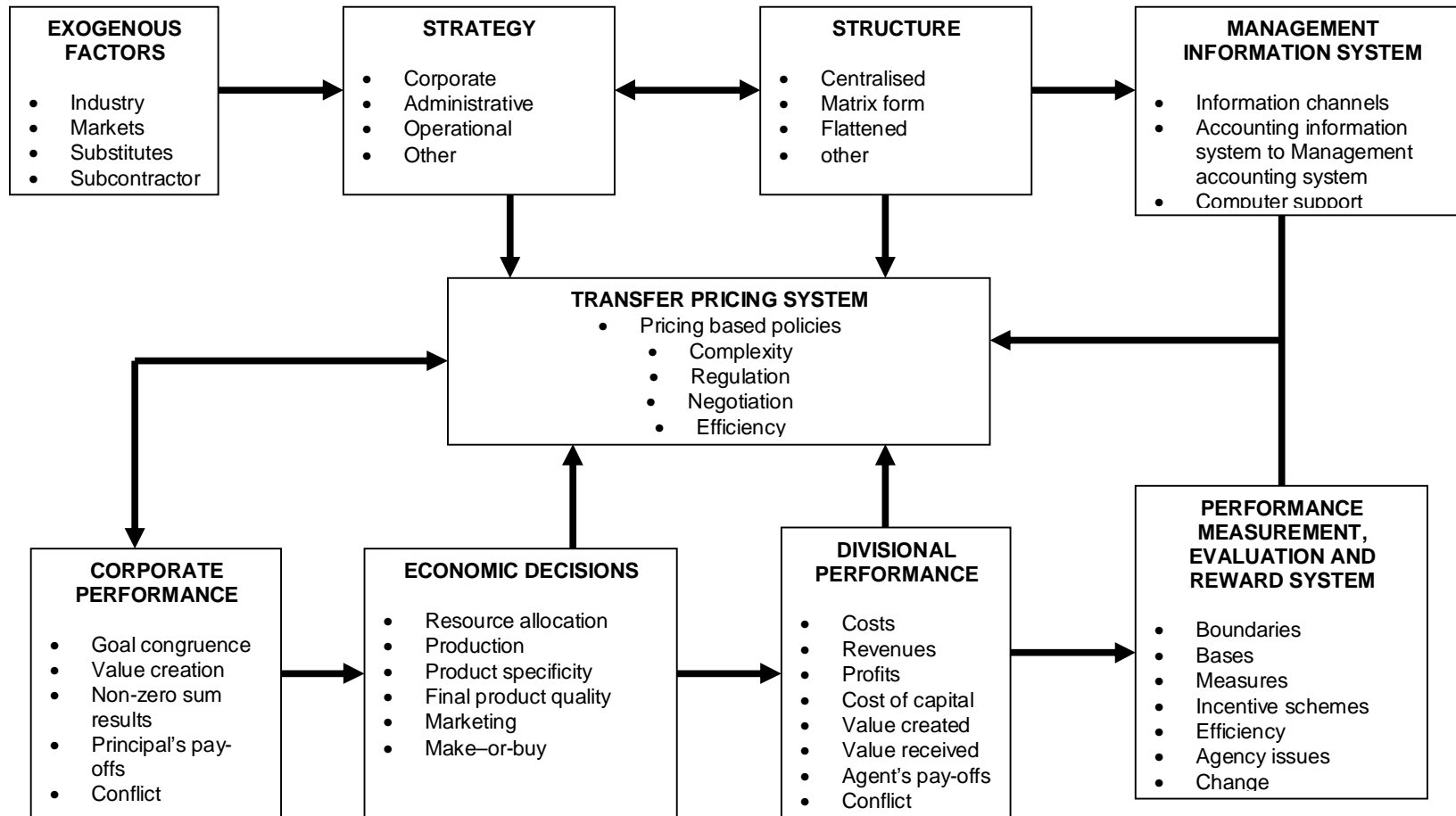
The second theoretical model depicted in Table 3.2. relates to Spicer (1988) who stresses that variations in a firm's strategic, organisational and transactional circumstances explain a firm's choices of transfer pricing mechanisms and policies. Also, Spicer (1988) classifies the transferred goods as idiosyncratic, customised or standard, and emphasises the sophistication of capital investment and sensitivity of the technology involved in the interdependent divisions.

Table 3.2.**Organisation theory model (adapted from Spicer, 1988)**

Interdivisional Trade	High idiosyncratic	Neutral customised	Low standard
Stable	Manufacturing cost		
Annual change		Manufacturing cost and negotiation	
Monthly change			Market price
	No effective competition-unique properties	Differentiated in short-term	Competitive external market

The third framework depicted in Table 3.3. is developed by Emmanuel and Mehafdi's (1994) who introduce qualitative and quantitative interacting variables such as management information systems, strategy, value chain, organisational structure, divisional autonomy considerations, dimensions of internal trade and the nature of the performance evaluation and reward systems. Both Eccles' and Spicer's models are heavily strategy-based, while Emmanuel and Mehafdi's (1994) framework, although empirically untested, is broader and provides variables that can be investigated for transfer pricing research.

Table 3.3. Transfer Pricing Framework (Emmanuel and Mehafdi, 1994)



3.1.1. Shortcomings of extant theories

The relevant theories and frameworks that currently exist (i.e., Emmanuel and Mehafdi's (1994) transfer pricing framework, the Value Chain Framework (Porter, 1980), the Competitive Advantage Theory (Porter, 1980) and the Resource-Based Theory (Peteraf, 1993)) are not capable of explaining the relationship between transfer price, value chain and competitive advantage. Emmanuel and Mehafdi's (1994) work is generic and designed to analyse transfer pricing within manufacturing organisations. In order to explain transfer pricing strategies, economic models, mathematical models and behavioural are developed.

First theoretical works in the transfer pricing literature are carried out by Hirschleifer (1956) and Gould (1964) who develop economic models for determining the optimal transfer price. The optimal price is the market price if the intermediate market is perfectly competitive and the marginal manufacturing cost where the intermediate market is not perfectly competitive. Williamson (1985) develops a theory of economic organization that explains why economic activities are organized in particular ways and the key factors involved in these choices.

With a view to analyse complex transfer pricing situations involving multiple products, multiple divisions and multiple goals, mathematical models are advanced by Baumol and Fabian (1964). Mathematical model based on linear programming decomposition principle, posits that the price of the intermediate product should be equal to the opportunity cost of producing the product. Major aim of mathematical modeling approach is to determine the transfer price that optimizes management's objective.

Both economic modeling and mathematical modeling works do not give consideration to the behavioural aspects of transfer pricing process. To address the behavioural dimension of transfer pricing, Watson and Baumler (1975) suggest that firms should consider organisational differentiation as firm's strategic, organizational and transactional circumstances explain a firm's choice of transfer pricing method. It is suggested that better inter-departmental relations can be achieved through the use of negotiated transfer prices. Watson and Baumler (1975) draw on results of Lawrence and Lorsch (1967) who conclude that firms that achieve the necessary segmentation and integration also achieve profitability.

Eccles (1985) argues that because its emphasis is on formal economic theory and mathematical programming, these theories are largely irrelevant to the problems of practicing managers and existing theory about transfer pricing bears no relationship to the empirical phenomenon. Eccles' (1985) point is also supported by McAulay and Tomkins (1992) who report that the solutions provided by models cannot be always operationalised and theoretical concepts should also incorporate practice. With reference to the state of research in management accounting Maher (1983) reports that "the lack of theory and testable hypothesis in management accounting limits our opportunities for systematic empirical work. Of course much can be learned from purely descriptive studies – inductive reasoning can play an important role in developing theory and testable hypothesis. But I believe that the next major breakthroughs will come from empirical work that follows theory".

The inability of transfer pricing theories to explain the practice is evident because full cost pricing is more widely adopted than model-suggested marginal cost-based pricing.

A theoretical framework which underlies the consumers' overall product valuation is absent from the literature. Such a framework should address the issues of how consumers perceive the benefits and costs of products (evaluation process) as well as what possible benefits and costs consumers may perceive from products in the market (Huber, Hermann and Morgan, 2001).

The value chain framework (Porter, 1985) focuses on linkages among activities that gradually transform raw materials into finished goods, and has been primarily designed for goods. In the Competitive Advantage Theory propounded by Porter (1980), gaining competitive advantage is determined by responding to industry-specific requirements with the focus being on mainly external factors such as industry conditions. Porter (1985) also argues that competitiveness grows fundamentally out of the value a firm is able to create for its buyers that exceeds the firm's cost of creating it. The buyers referred to here are external buyers. Although the unit of analysis in Porter's (1980) competitive advantage theory is ostensibly the firm, there is ambiguity whether reference is made to firm or products. Resource-Based View (RBV) of the Firm recognizes a firm's resources such as assets, competencies, reputation, brand names, capabilities and processes, etc. as the source of competitive advantage (Barney, 1991), and hence it focuses more on internal factors. The RBV suggests that the source of competitive advantage is rooted in a firm's resources and capabilities, but it does not consider the internal value creation in pursuit of competitive advantage.

While it is recognised that the creation of competitive advantage in service industries displays unique characteristics (Matthyssens and Vandenbempt, 1998), the Competitive Advantage Theory and Resource-Based View primarily focus on goods and not services. Among theoretical frameworks on transfer pricing, although generic, Emmanuel and Mehafdi's (1994) framework is the closest to the subject matter of the present research.

This framework provides a list of interacting variables that may constitute the basis for future theoretical studies. Consequently, the interaction between transfer price, value chain and competitive advantage cannot be explained by any of the extant theories.

Currently there is no appropriate theory that can explain the linkage among the three constructs studied. For this reason, an inductive research approach is adopted with a view to develop a new theory to explain the phenomena from the observation of empirical reality, and to describe different patterns, which emerge in the data. Finally, by standard classification, research designs are of two types: basic research and applied research (Collis and Hussey, 1993). The aim of the basic research is to improve knowledge generally without any particular applied purpose in mind at the outset. Applied research, however, is designed from the start to apply its findings to a particular situation. This research can be classified as basic research for it aims to improve our understanding rather than solving a specific problem.

3.2. Research Philosophy

At the philosophical level, Collis and Hussey (2003) classify the main research paradigms into either positivist and phenomenological. These two philosophical approaches are very different. The positivist approach is associated with deductive reasoning and seeks to test hypotheses moving from general principles to specific instances. The positivist approach involves seeking the facts or causes of social phenomena with little regard to the subjective state of the individual and establishes causal relationships between the variables by establishing causal laws and linking them to a deductive and integrated theory. The positivist paradigm is based on the assumption that the world is objective and the emphasis is on facts and the formulation and testing of hypotheses with the aim of falsifying them (Blaikie, 1993). The examination of internal value creation involves perceptions of internal customers and opinions of corporate managers, which are subjective.

The research topic does not fully fit with the Blaikie's (1993) definition of positivistic paradigm, which assumes that the world is objective – in the present inquiry, the world is assumed to be subjective - and the emphasis is on facts and the formulation and testing of hypotheses with the aim of falsifying them. To the contrary, the emphasis in the present inquiry is placed on subjective aspects of human activity and on meaning.

On the other end of the philosophical continuum lies the phenomenological approach. In contrast, the phenomenological paradigm is based on the assumption that the reality is constructed rather than objectively determined (Easterby-Smith, Thorpe and Lowe, 1995). It employs inductive data analysis to provide more understanding of the interaction of mutually shaping influences and to explicate the interacting realities and experiences of researcher and participant (Lincoln and Guba, 1985).

The phenomenological paradigm pays considerable regard to the subjective state of the individual and stresses the subjective aspects of human activity by focusing on meaning rather than measurement of social phenomena. Phenomenological research begins with the acknowledgement that there is a gap in our understanding, and that clarification will be of benefit. Following Carson *et al.* (2001), for the current research, the researcher prefers to use a broader term 'interpretivism' instead of "phenomenology". The interpretivist approach provides for a compromise between the two extremes and incorporates the development of preliminary frameworks early on (Miles, 1979) and allows the researcher to figuratively put brackets around a temporal or spatial domain of the social world (Van Maanen, 1979). Interpretivism allows the focus of research to be on understanding what is happening in a given context (Carson *et al.*, 2001).

The current research, as discussed in the following paragraphs, is a pioneering study in an area that has not been explored earlier. However, there are some studies conducted in associated fields such as transfer pricing practices of manufacturing enterprises, international transfer pricing, value creation for external customers, and some patchy work on value creation in internal transactions. This research is exploratory and the aim is to gain an understanding of what is happening in service industries in terms of general domestic transfer pricing issues, aspects of internal transactions particularly from the viewpoint of value creation for internal customer, and the place of internal price in the relationship between internal supplier and internal customer.

The research seeks to examine the phenomenon, particularly from the internal customer's perspective, and involves a great deal of understanding and interpretation of data collected both from interviews conducted and the survey questionnaire. For these reasons, the researcher decided to build the research based on what is currently known around the topic areas examined but without making any assumptions or hypotheses. Therefore, the research involved no empirical testing, and consistent with Miles (1979), it draws on extant theories and knowledge.

The research question has not been empirically examined to date, knowledge on the transfer pricing practices of service organisations is very little, and extant theories are inadequate to explain the transfer pricing phenomenon. For this reason, there is a need to adopt a holistic approach to gain a comprehensive understanding of the phenomenon under investigation.

Fetterman (1989) suggests that holistic orientation helps the researcher to discover the inter-relationships among the various systems and sub-systems in the organizations under study through an emphasis on the contextualization of data where contextualization refers to placing observations, experience and interpretations into a larger perspective. Obviously, the positivistic and phenomenological philosophies represent the two extremes. In some ways, however, such as the independence of the observer, operationalising concepts and taking larger samples represent departures from a phenomenological stance to a more positivistic approach. As Easterby-Smith, Thorpe and Lowe (1995) claim, in practice, the researchers involved do not hold scrupulously to one or the other approach. Likewise, Carson *et al.* (2001) and Borch and Arthur (1995) find it appropriate for researchers to adopt a dual position in terms of embracing a variety of research philosophies depending upon the nature of the topic or research problem.

Moreover, Borch and Arthur (1995) suggest that both approaches (positivistic and phenomenological) should be used because mixed methodologies would contribute to the richness of the research, also it is now recognized that taking a polarised philosophical position is not warranted and indeed unnecessary (Carson *et al.*, 2001).

Finally, the current research focuses on gaining a better understanding of the internal value creation process and the role, if any, the internal transfer price has on it. As a result, the philosophical position taken in research is essentially interpretivist. However, as discussed in the following paragraphs, the selected features of the positivism, such as surveys, relatively larger sample size and the use of multivariate statistics are utilised.

3.3. Research Design

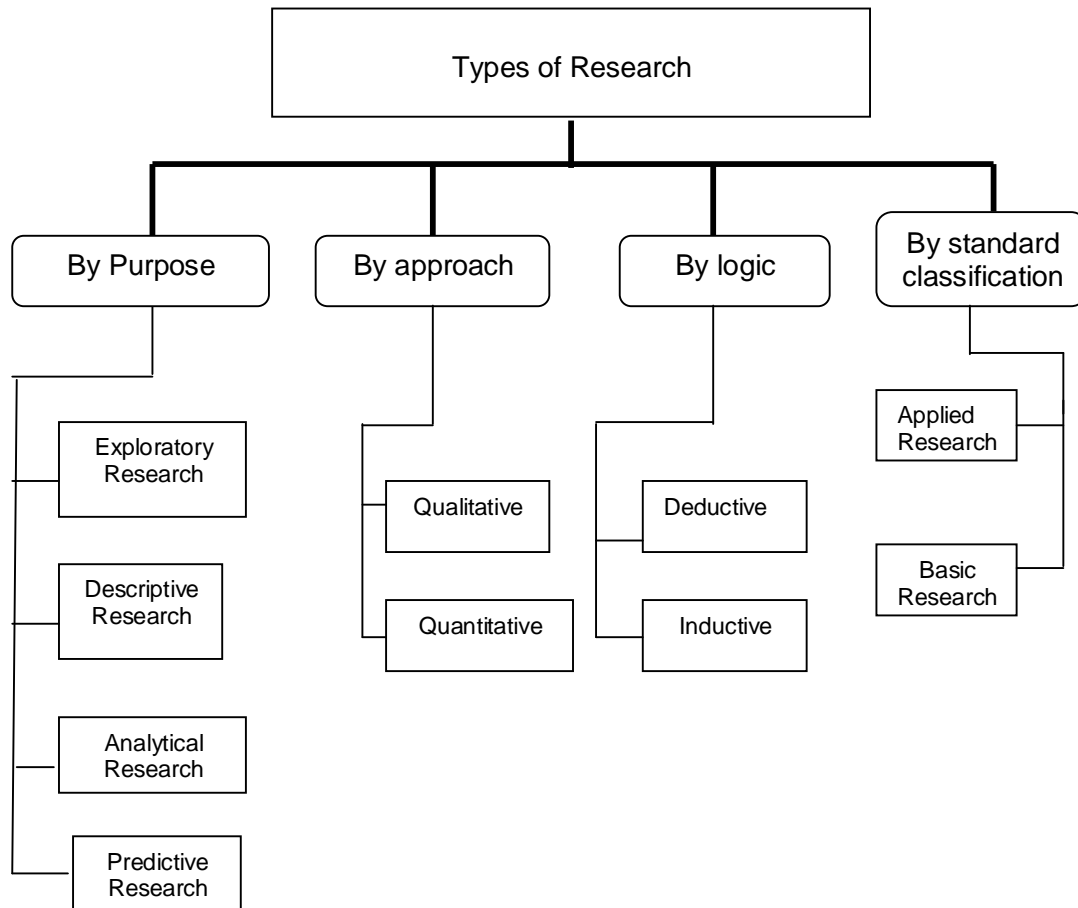
The research design is determined by the research philosophy adopted for the research project. As illustrated in Figure 3.1, “by purpose”, Collis and Hussey (2003) distinguish between four types of research purposes: (1) Exploratory research, (2) Descriptive research, (3) Analytical research / explanatory research, and (4) Predictive research

Exploratory research is used to study a research problem or issue when there are very few earlier studies to which we can refer for information about the issue or problem. The aim of this type of inquiry is to look for patterns, ideas or hypotheses rather than testing or confirming a hypothesis. The paucity of research in the area being studied supports an exploratory research design. Smith and Nagle (2002) also claim that exploratory research methods such as in-depth interviews are usually effective for understanding and measuring value. Descriptive Research describes phenomena, as they exist. It is used to identify and obtain information on the characteristics of a particular problem or issue. The current research seeks to examine and describe transfer pricing and internal customer value generation in service settings and, thus gain, insight into this phenomenon.

Analytical (explanatory) research deals with the analysis and explanation of why or how something is happening and measuring causal relationships among them. Predictive research – forecasts the likelihood of a similar situation occurring elsewhere, and aims to make generalisations. Most of the service contexts are situation- specific and the chosen grounded theory approach is not amenable for generalisation. “By approach”, Collis and Hussey (2003) distinguish between two types of research design: qualitative and quantitative. The phenomenological approach is qualitative in nature.

Figure 3.1

Types of research (adapted from Collis and Hussey, 2003)



Therefore, the qualitative approach is adopted for examining and reflecting on perceptions in order to gain an understanding of social and human activities (Collis and Hussey 2003). Carson *et al.* (2001) recommend the adoption of qualitative research where the research emphasis is on in-depth understanding of how, why and in what context certain phenomena occur; and what impacts upon or influences such phenomena.

In-depth understanding of a situation is based on researcher immersion in the phenomena to be studied, gathering data, which provide a detailed description of events, situations and interaction between people and things (Patton, 1990).

Consistent with the aims of the present research, the qualitative approach is favoured owing to its ability to generate rich data and insights. In addition, the subjectivity of qualitative research design facilitates the examination of intangible aspects of the research subjects such as values, attitudes, and perceptions. However, the research project also involves collecting and analysing numerical data. Therefore, a combination of qualitative and quantitative approaches is used. "By the logic used", Collis and Hussey (2003) differentiate between two types of research: inductive and deductive. Deductive research moves from general ideas/theories to specific particular and situations: the particular is deduced from the general theories, whereas inductive research – moves from particular situations to make or infer broad general ideas/theories. The phenomenological paradigm employs naturalistic inquiry to understand inductively and holistically the human experience in context-specific settings (Patton, 1990). For this exploratory research, both qualitative and quantitative data were collected and used.

There is support in the literature for using both quantitative and qualitative methods (Carson *et al.*, 2001; Fielding and Fielding, 1986). Carson *et al.* (2001) report that using multiple methods allows more perspectives on the phenomenon being investigated and contributes to the achievement of holistic perspective. Qualitative data are contextually embedded and, therefore, allow the phenomenon to be studied in more detail and depth, which in turn, enrich the research output (Patton, 1980).

3.4. Sampling Frame

As indicated earlier in Chapter 1, the distinction between goods and services is often blurry. Even in manufacturing organisations, almost always there is some kind of service component. For the purposes of this research organisations with most intangible components were targeted. The service industries chosen include engineering, logistics, telecommunications, financial services, insurance and health care. Because the sample frame consists of several service industries, stratified sampling was used, and a random sample was taken from each category.

First, organisations operating in the above areas were determined using the following databases:

- a. Australian Stock Exchange –listed companies
- b. Australian Finance Conference (AFC) and Australian Prudential Regulatory Authority (APRA)
- c. Advertising Federation of Australia (AFA)
- d. Insurance Council of Australia (ICA)
- e. Business Review Weekly “The Top 500 companies”

Organisations with less than 20 members and those which were de-listed or registration pending were excluded. Second, using stratified sampling a total of 285 firms was drawn from the populations cited above.

The sampling frame for the present research consists of service firms operating in logistics (nineteen firms), engineering services (six firms), telecommunication services (twelve firms), information technology (twenty-one firms), health care (seven firms), financial service (twenty-two firm), and insurance (sixty-seven firms) categories.

Firms from various service industries were chosen in order to gain insight into the major service industries as well as to detect any variations that might exist among those firms. Geographically, all firms contained in the sampling frame are located in Australia.

Theoretically, services are by nature deeds, processes and performances all of which are intangible. In practice, most transactions involving goods also involve services as complementary to tangibles. Many firms offer some combination of tangible and intangible products. For the purposes of this research, however, the key criterion to select service firms was the level of dominance of intangible content.

3.5. Data Collection

The data for this research were collected by means of interview and survey questionnaire. The multiple data collection provides a method for triangulation for stronger substantiation of constructs and hypotheses (Eisenhardt, 1989; Scapens, 1990). As a guide to data collection, Fontana and Frey (1994) warn researchers not to impose a prior framework on the perceptions of meanings, definitions or interpretations that respondents provide, and add that any relevant literature may be used as a guide. Popay, Rogers and Williams (1998) maintain that in qualitative work randomness and representativeness are of less concern than relevance, and add that the sample should produce the type of knowledge necessary to understand the structure and processes within which the individuals or situations are located. Therefore, it is recommended that initial sampling decisions are purposive in that selection of participants is made on the basis of their ability to provide relevant data on the area of investigation (Glaser, 1978).

3.5.1. Interviews

In order to collect the qualitative data, the in-depth interviewing methodology was adopted. The purpose of in-depth interviewing is to get inside someone's head and enter into their perspective to find out things like feelings, memories and interpretations that we cannot observe or discover in other ways (Patton, 1990; Mellon, 1990). Belk, Sherry and Wallendorf (1988) find in-depth interviewing particularly useful in expanding current understanding of other areas of consumer behaviour. Similarly, Babbie (1989) and Hudson and Ozanne (1988) use and find that in-depth interviewing can provide a deeper understanding of the customer and service provider relationships from the receiver's perspective. The interview design determines the depth and freedom with which a respondent can respond.

It is aimed to capture perceptions and conceptualisation of individuals both at corporate and divisional levels. Structured-interviews where the same questions are asked to each respondent – is inappropriate for this type of research because it is considered less flexible and it offers less freedom to the interviewer.

Unstructured interview was also ruled out because the present research requires in-depth coverage of selected areas of investigation. Moreover, as Goulding (1999) highlights, the totally unstructured interviews cause confusion, incoherence and result in meaningless data. Consequently, the semi-structured interview method was chosen because of its usefulness for an exploratory research which seeks richer meanings and understanding of the subject area. Also, it allows the interviewees to describe the phenomena in their own words.

Gwinner, Gremler and Bitner (1998) report that obtaining the customer's viewpoint in their own words has largely been ignored in the literature. The semi-structured interviews provide for means to probe further on the responses. It also enables the researcher to clarify questions, correct misunderstandings, offer prompts and follow-up new ideas.

The semi-structured interviews contained a combination of mostly open and few closed questions. Interviews were transcribed verbatim with a view to reduce bias by including the entire script of the interview. In order to ensure that the transcript adequately reflects what is actually covered in the interview, punctuation marks, underlining, boldening are employed to stress meanings and feelings.

The interview transcripts were analysed manually by highlighting recurring themes (Appendix 6). While in-depth interviews are appropriate for exploratory research, they have some weaknesses that the researcher took into account, particularly as they relate to inferences. The major weakness of in-depth interviewing is that the interviewees may display a tendency to give socially desirable responses. During the interviews, utmost attention was paid not ask any leading questions and not to make any gestures to suggest approval or disapproval of responses.

Despite all efforts, the researcher acknowledges that respondents may still give convenient answers which, unfortunately, is not controllable.

3.5.1.1. Pilot Study

The following aspects of the interview questions have been pre-tested:

- a. appropriateness of interview questions;
- b. clarity of interview questions;
- c. sequence of interview questions; and
- d. length of the interview;

At this stage, interviews were held with the sponsorship manager of a major conglomerate that has interests in health care and logistics and a manager of an insurance company. Also, key questions were examined by two academics that are skilled in questionnaire and interview question design and both had managerial level practical background in service industries.

During the pre-testing stage of the interview questions, necessary amendments were effected in line with feedback from the reviewers. The amendments included changing the wording, for example, avoiding the use of jargon wherever possible and deleting questions,

3.5.1.2. Administration of the interviews

The chief financial officers (CFO) were sent an initial letter of introduction which presented the purposes of the research, voluntary nature of cooperation, assurance of confidentiality and the expected length of the interview (Appendix 1). The names of CFOs were obtained either from the website of businesses or by telephoning the company directly. Some interviewees asked to see the interview questions before they committed. In such cases interview questions were forwarded to them forthwith. Three weeks later, a second mail-out was sent (Appendix 2).

For cost and convenience reasons, only organisations based in Melbourne were approached. In total, thirteen interviews were conducted. Arranging interviews proved to be very hard. Many executives declined, citing time, as the limiting factor.

Two organisations responded stating that it is their company policy not to be involved in surveys. In the case of four organisations, relevant executives wanted to see the questionnaire and then decided to decline.

For seven of the organisations that agreed to be interviewed, questions were forwarded for their review before they committed. The researcher's observation from this experience is because service organisations like other industries are operating in a competitive environment, their managers are overworked and do not have time for interviews. In one of the organisations interviewed, they had associations with the Faculty of Marketing at RMIT and they were rather receptive to my approach, but it took their CFO about two weeks to obtain approval from her Chief Executive Officer.

She stated that each executive has to account for every single hour, and for this reason she had to seek approval. Another executive from a big commercial bank told that he received 300 e-mails per day on the average. In most organizations, however, executives required approval from the Manager of Human Resources. Cumbersome procedures discourage managers. In some cases, even though the respondent seemed to be willing or at least non-reluctant to be interviewed had to decline. Interviews were carried out between October 2004 and December 2005 with both corporate managers and divisional managers of participating organizations (Table 3.4).

Table 3.4.

Positions of the interviewees

Company	Position
A1	Manager- Asia Pacific Verification
A2	Project Manager
A3	Director-Sales and Account
A4	Manager –Testing
B	Fund Manager – Specialist Global Markets
C	Sponsorship Manager
D	General Manager
E	Business Manager
F	Chief Financial Officer
G	Head of Strategic Cost Management Group
H	Deputy Regional Manager
I	Business Manager
J	Project Manager

All interviews were held at the offices of interviewees. In two cases (Company A2 and Company B), interviews were held at a nearby café. At the beginning of each interview, interviewees were given full information about the research. Each interview lasted about 40 minutes. All but one of the interviews were taped and transcribed. One informant did not want to be taped. So, detailed notes were taken during the interview.

The interview questions for corporate management are organised under five headings: organisational structure, strategy, service attributes, internal pricing, and value. Interview questions for divisional management seek to obtain information from both supplier and buyer's point of view and relate to the attributes sought in internal transactions, specific value information with respect to value generation during internal transactions. The interview guide was intended to serve as a prompt (Appendix 4).

Respondents were asked 25 open-ended questions regarding the attributes that they considered important in assessing service value. Questions have been asked in the same order, and wherever possible using the same wording. However, in order to obtain better data, following Schober and Conrad (1997), questions were explained or clarified where needed. The interviews were taped with the interviewees' permission and transcribed verbatim. As an interviewer, the researcher chose to confine his communication strictly to the questions and refrained from making any personal judgment during the conversation and asking any leading questions.

3.5.1.3. Reliability of transcription

A digital recorder was used to record interviews. The sound quality was reasonably good. First, the tape was transcribed following the interview, and then a few weeks later, the tape was listened to again and the quality of transcriptions was improved. In order to fully capture the spirit of the interviews, in addition to transcribing interviews from an oral to a written mode every effort was made to include pauses, repetitions, tone of voice, etc. To be used for validity and to use later, the taped interviews have been saved. Interviews were to be transcribed in full. A sample interview transcript is provided in Appendix 6.

The words were transcribed verbatim with a view to reduce bias to include the entire script of the interview. In order that the transcript reflects what is covered in the interview, punctuation marks, underlining, boldening is employed to stress meanings and feelings.

3.5.1.4. Interviewer error and bias

There is a risk of interviewer bias which may emanate as result of asking leading questions or non-verbal behaviour of the interviewer. With the respondent's permission, the whole interview was recorded on a digital note-taker, and later it was transcribed and analysed, in full.

The major reasons behind tape-recording the interviews are specified below.

- a. The interviewer can concentrate on listening and responding to the interviewee, hence distraction might be reduced to write down what has been said. This allows for the discussion to flow.
- b. The interviewer bias is reduced
- c. The whole interview can be captured, and this provides for the analysis of the complete data so cues that were missed the first time can be detected later.

Ferreira and Merchant (1992) report that transfer pricing is a sensitive topic and the use of one-to-one interviews reduces response bias. With a view to eliminating bias and error, every effort was made to avoid leading questions, and not to deviate from the written questions. To address the interrogation error, questions were phrased in a uniform fashion. Finally, to eliminate any recording errors, transcriptions were checked for context and content accuracy prior to data analysis. The researcher transcribed interviews himself. For some transcripts where the researcher was not sure of the quality of transcript, professional help was sought.

3.5.1.5. Ethical issues

Ethical approval to conduct interviews and administer questionnaires was received from the RMIT University Ethics Committee. The introductory letter on RMIT letterhead sent to respondents indicated:

- a. The overall purpose of the research as well as benefits from participation in the research project. In addition it was also made clear that interview questions could be supplied to interested respondents before the interview;
- b. Right to withdraw from the study at any time;
- c. Respondents have been sent an introductory letter on RMIT letterhead which;
- d. The cooperation is voluntary and that they can withdraw at any time;

- e. The interviewer's name;
- f. Results of the research will be aggregated and there will not be any reference to contributing organisations or interviewees;
- g. Confidentiality of the information provided, the name of the organizations as well as identity of interviewees would be assured to protect participants' privacy; and
- h. A telephone numbers of the lead supervisor, supervisor, and the Chair of the Business Portfolio, Human Research Ethics Sub-committee.

3.5.2. Mail Questionnaires

3.5.2.1. Rationale for using the written questionnaires

In addition to the interview data, structured written questionnaires were administered to the sample subjects. As Brownell (1995) cites the low cost and ability to cover larger geographical areas are the major strengths of written questionnaires. He also adds that more carefully considered responses may result from respondent's careful reflection on the written questionnaire. Another advantage of the written questionnaire is the absence of bias that may be present in the interview. The self-administered nature of questionnaires allows respondents to fill them out at their convenience.

3.5.2.2. Weaknesses of the questionnaires

Response rates are poorer when respondents are approached by mail as opposed to personal approach (Brownell, 1995). To overcome this, the researcher, in the second mail-out wrote personalised messages and personally contacted some organizations, which seemed to work to a degree. Because of lower response rates, non-response error may result. Brownell (1995) also believes that despite assurances of confidentiality and anonymity, respondents may still respond in a socially desirable manner.

Although the researcher acknowledges that there is a potential risk of respondents' giving answers in ways that they find convenient, this weakness of the written questionnaire is inherent and cannot be controlled or reduced by the researcher. Maintaining respondent's interest and motivation in the subject matter of the questionnaire is another concern, and little can be done about it (Brownell, 1995).

3.5.2.3. Pilot Study (Questionnaire)

With a view to identifying and eliminating problems before embarking on the research project, a pilot study was administered on eight reviewers (two practitioners, six academics).

Following Johns and Lee-Ross (1998), in addition to ensuring all relevant areas have been covered, the pilot test was performed to:

- a) check whether the questions are relevant to all members of the sample;
- b) check whether respondents understand all the questions;
- c) check the logic of question order;
- d) check whether any questions have double meanings, or lead or confuse respondents;
- e) get an idea of the likely refusal rate;
- f) suggest ways of rephrasing open-ended questions as closed or multiple choice ones;
- g) show how long it takes to complete a questionnaire;
- h) indicate whether answers accord with design expectations;
- i) check the reliability of questions; and
- j) indicate whether further instructions are necessary.

The identified inadequacies which surfaced during the pilot study were rectified based on the comments and suggestions received from the reviewers.

3.5.2.4. Content of the questionnaires

Mehafdi and Emmanuel (1997) contend that research instruments used in prior surveys on transfer pricing failed to ask questions on pertinent issues such as the extent of the internal trade, internal conflict, the strategic dimension of transfer pricing system and the locus of the sourcing and transfer pricing decision. Further, Colbert and Spicer (1995) established that previous surveys gathered data primarily from the corporate staff and stressed the importance of involving the divisional staff in the research. Churchill's (1978) guidelines for developing constructs were followed, the research questions' domains were defined, and a list of items was generated following review of relevant literatures. The questionnaires were developed based on a thorough review of the literature and feedback from the reviewers. A copy of questionnaires is provided in Appendix 3.

Four items were reverse-scored to minimise response set bias. Scales used in the questionnaire are also drawn from the extant literature. A self-administered questionnaire was completed by divisional managers. The purpose of the questionnaire was explained, and then respondents were asked to complete the questionnaire.

Questions were primarily designed to capture respondents' perceptions of benefits received (responsiveness, reliability, assurance, empathy, tangibles, alternative solutions and customization, flexibility and innovation) and perceived sacrifice (price, time, effort, energy and psychic costs) with the difference between perceived benefits and perceived sacrifice yielding the net value provided. Each questionnaire was four pages in length. The majority of the questions on the questionnaire were multiple-choice judgments of relative importance.

Care was taken to ensure that questions covered concepts and theoretical constructs contained in the research questions. Effort was made to use no or minimum jargon, and provide explanation where jargon was used.

Responses to scales were made on 5-point Likert scales anchored by strongly disagree and strongly agree at the endpoints 1 and 5 respectively. The SERVQUAL instrument has been the predominant method to measure consumers' perceptions of external service quality. Zeithaml *et al.* (1990) argue that departments and divisions within a company could use the SERVQUAL with appropriate adaptation. Chaston (1994), Young and Varble (1997) and Edvardsson, Larsson and Setterlind (1997) and Lings and Brooks (1998) support that SERVQUAL could be utilised to measure internal service quality. Following Dabholkar, Shepherd and Thorpe (2000), service quality and value perceptions are assumed to be multi-dimensional. For the purposes of this research, a modified version of SERVQUAL was employed.

3.5.2.5. Administration of the questionnaires

Information gathering via survey questionnaire was carried out at two levels: (1) corporate; and (2) division. Much of the empirical research on actual transfer pricing has been done with firm-level surveys (i.e., Tang, 1979; Vancil, 1979; Borkowski, 1990).

Colbert and Spicer (1995) argue that such studies resulted in limited understanding and insights because they were directed at the level of the firm as a whole rather than at the divisional level where internal transfers actually take place. Philips (1981) reports that high-level managers provide more reliable information on organisational phenomena than do lower ranking managers. It is found that the human resources department is most likely to be involved in the implementation of the internal marketing plan (George, 1990; Rafiq and Ahmed, 1993).

Therefore, a total of 285 questionnaires were addressed and mailed to the Chief Executive Officer or the Manager of Human Resources. The covering letter that accompanied the questionnaire was addressed to the human resource manager or chief executive officer, managing director, as the case may be. The addressee's were asked to pass on the questionnaire B (designed for the divisional management) to a divisional manager of his/her choosing within their organisation with the appropriate knowledge. The questionnaire was accompanied by a letter describing the research and its purposes, soliciting participation and assuring respondents' anonymity.

A reply-paid envelope addressed to the RMIT University for returning the completed questionnaires was also made available. In order to promote cooperation, a copy of the published results was offered. The mail-out of the survey occurred in October 2005 and 36 responses were received from the first mail-out.

Four weeks after the first mailing, a follow-up mailing that included the same material as the initial mailing was sent. As suggested by Dillman (2000) extensive follow up procedures have been utilised. A hand-written message requesting respondents' personal attention and thanking for their time was attached. The second mail-out produced a further 44 responses. Across both mailings, 85 usable responses were obtained. Some were undeliverable. Four surveys were excluded from the study because of omitted items. Thus a total of eighty questionnaires was available for analysis representing a response rate of approximately 28.07 percent.

CHAPTER 4: DATA ANALYSIS

The aim of this section is provide a summary and analysis of the findings resulting from interviews and questionnaires. Data gathered from interviews were subjected to qualitative analysis and no software package was used. Questionnaire data, however, were subjected to both qualitative (descriptive) and quantitative (factor analysis) analysis. The first part of this Chapter (4.1) reports the descriptive analysis, and the second part 4.2) is concerned with the factor analysis procedure performed. For both descriptive and factor analysis, SPSS version 13.0 software was used. Discussion of findings, limitations of the research and implications for further research are outlined at the end of the Chapter.

4.1. Descriptive Analysis

4.1.1. Response rate

4.1.1.1. Questionnaire

Shostack and Fairweather (1970) assert that discussions of survey methodology are severely limited by the lack of precisely defined and broadly accepted definitions of survey outcomes, and as a result, reported response rates are often misleading and frequently overstated.

The response rate calculations used here were based on the definition of response rate by the Board of Directors of the Council of American Survey Research Organizations, a trade association representing more than 100 U.S. research firms (Wiseman and Billington, 1984).

The formula used follows:

$$\frac{\text{Number of completed interviews with responding units}}{\text{Number of eligible responding units in the sample}}$$

The survey sample consists of a total of 285 service organizations residing in Australia. A total of 80 usable responses was obtained for a response rate of 28.07 percent. The breakdown of responses by responding industries is presented in Table 4.1.

Table 4.1
Profile of the sample and response rate

	Returned questionnaires (Number)
Transportation and storage	12
Telecommunications	8
Healthcare services	7
Finance and Insurance	30
Property and business services	23
Total	80

Sample sizes, response rates and research methods of major transfer pricing studies in the literature are provided in Table 4.2. It is acknowledged that empirical data on transfer pricing may be considered sensitive by many organisations making access to such data difficult. Some researchers have encountered lower response rates as a result (Arpan 1972; Gray and Radebaugh, 1984). Grabski (1985) argues that the confidential nature of transfer pricing data resulted in publication of a small number of empirical works.

Further, Emmanuel and Mehafdi (1997) asserted that because of the difficulties of carrying out case research, most researchers resorted to survey method although the research question begged otherwise. These studies mainly concentrate on manufacturing industry.

With reference to consumer surveys associated with quality, Parasuraman *et al.* (1991) report that the typical expected response rate should be between 20-25 percent. The current Consequently, in consideration of the comparative response rates obtained in prior surveys (Table 4.2) and following Parasuraman *et al.* (1991), the response rate of 28.07 percent is considered adequate for this research.

Without taking into account complexity and comprehensiveness of each survey, it is not very easy to compare these surveys based solely on response rates. Some surveys, for example, are basic (i.e., Tang, 1979; Zaman, 1992) while some others, such as Eccles (1983) are comprehensive.

Table 4.2**Comparative sample sizes on domestic transfer pricing surveys**

	Number of usable responses	Response rate	Type of research
Current study	80	28.1 %	Survey + Interview
Colbert and Spicer (1995)	4	na	Interview
Alam and Hoque (1995)	64	53%	Survey
Meer-Kooistra (1994)	4	na	Interview
Drury <i>et al.</i> (1993)	198	27%	Survey
Bafcop, Bouquin and Decreumaux (1991)	46	74%	Survey
Mehafdi (1990)	33	22%	Survey + Interview
Atkinson (1987)	186	43%	Survey
Eccles (1985)	13	na	Interview
Price Waterhouse (1984)	74	50%	Survey
Whiting and Gee (1984)	57	17%	Survey
Govindarajan and Ramamurthy (1983)	41	58%	Survey + Interview
Yunker (1983)	52	14.5%	Survey
Scapens <i>et al.</i> (1982)	211	29%	Survey + Interview
Mostafa (1982)	46	18%	Survey
Tang (1981) UK	80	28%	Survey + Interview
Tang (1981) Canada	192	48%	
Benke and Edwards (1980)	19	Is not specified	Interview
Tang (1979)	247	36.9%	Survey
Kim and Miller (1979)	30	8.8%	Survey
Lambert (1979)	61	31%	Survey
Drury and Bates (1979)	95	74%	Survey + Interview
Wu and Sharp (1979)	209	42%	Survey
Vancil (1979)	239	43%	Survey

4.1.1.2. Interviews

Cooperation was obtained from nine service organisations, and a total of thirteen in-depth interviews lasting between forty minutes to two hours was conducted (Table 4.3). The purpose of interviews was to gain better understanding of the transfer pricing practices, value chain, and value creation process.

Table 4.3
Profile of interviewed organisations

	Sample size	Number of organisations agreed to be interviewed
Transportation and storage	19	1
Engineering	6	0
Telecommunications	12	2
Information technology	21	0
Health care services	7	0
Finance and Insurance	67	3
Property and business services	22	3

The interviews were semi-structured and were conducted using an interview guide which consists of a combination of open and closed questions.

4.1.2. Pre-analysis data checks

4.1.2.1. Accuracy of data entry

The data were coded for analysis by SPSS 13.0 software and then transferred to a code sheet. Ten percent of the questionnaires were checked for coding accuracy and ten percent of data entries (every tenth item) were verified for accuracy. Also, negatively-worded items (variables VAR191, VAR193 and VAR194) in “Time, Effort and Energy” were changed to a positive format.

4.1.2.2. Missing data analysis

Sekaran (2003) claims that respondents may leave certain answers blank because the respondent (a) did not understand the question, (b) did not know the answer or (c) was indifferent to the need to respond to the entire questionnaire. The missing information in the questionnaires is less than 9 percent which is not considered substantial.

4.1.2.3. Non-response bias

Non-response bias deals with the extent to which those not responding are systematically different from the whole population, and it is acknowledged that non-response can potentially affect results. Mado et al. (1983) identify three sources of non-response:

1. non-contact where a sampled company may not be contacted;
2. unit non-response where a sampled unit that is contacted may fail to respond;
and
3. item non-response where the unit may respond to the questionnaire incompletely.

Prior to the analysis, responses received from the first mailing were compared to those responses received after the second mailing using a Mann-Whitney test. Findings suggest that non-response bias was statistically insignificant .

4.1.3. Profile of respondents

The profile of respondents by sector is given in Table 4.4. Finance and insurance firms account for 37.5 percent of responses followed by property and business services (23.8%).

Table 4.4**Respondents by industry**

Sector	Frequency	Percentage
Communication	8	10.0
Finance and insurance	30	37.5
Health and community	7	8.8
Property and business services	19	23.8
Transportation and storage	12	15.0
Other	4	5.0
TOTAL	80	100.0

4.1.4. Size of respondents in terms of number of people they employed

Table 4.5 shows the breakdown of respondents with respect to their size in terms of employment. Thirty-eight percent of respondents employ between 21-200 employees, while the proportion of respondents that employ 201-500 employees was a close 36.3 percent. Respondents that employ more than 500 employees constitute 20 percent of the total respondents.

Table 4.5**Number of employees**

Number of employees	Frequency	Percentage
1-20	5	6.3
21-200	30	37.5
201-500	29	36.3
500+	16	20.0
Total	80	100.0

4.1.5. Size of respondents with respect to annual sales volume

Table 4.6 shows the distribution of respondents by their annual sales volume.

In regard to the sales volume of respondents, most firms (55%) have sales volumes in excess of AUD80 million. The second largest group (23.8%) represents firms with annual sales volume of \$40 to \$80m.

Table 4.6
Annual sales volume of respondents

Annual turnover (\$)	Frequency	Percentage
Less than 20m	6	7.5
20-Less than 40m	11	13.8
40-Less than 80m	19	23.8
More than 80m	44	55.0
Total	80	100.0

4.1.6. Organisational structure

Forty percent of respondents indicate they have a matrix organisation while 32.5 percent have functional, and 25 percent are organised as business units (Table 4.7).

Table 4.7
Organisational structure

Organisational structure	Frequency	Percentage
Matrix	32	40.0
Functional	26	32.5
Business unit	20	25.0
Total	80	100.0

4.1.7. Breakdown of respondents in terms responsibility centres

Most of the respondents are profit centres (50.6%) followed by cost centres (46.8%). A mere 2.5 percent are revenue centres (Table 4.8).

Table 4.8

Responsibility centres

Responsibility Centre	Frequency	Percentage
Cost centre	37	46.8
Profit centre	40	50.6
Revenue centre	2	2.5
No response	1	0.1
TOTAL	80	100.0

4.1.8. Parties to internal transactions

Eighty-one percent (81%) of respondents both buy and sell internally, 11.4 percent sell internally and 7.6 percent buy internally (Table 4.9).

Table 4.9

Nature of internal exchange

Nature of internal exchange	Frequency	Percentage
Buy internally	6	7.6
Sell internally	9	11.4
Both buy and sell internally	64	81.0
No response	1	0.1
TOTAL	80	100.0

Approximately sixty percent of respondents deal with profit centres, 36.7 percent with cost centres and 3.8 percent with revenue centres (Table 4.10).

Table 4.10**Internal trading partner**

Responsibility Centre	Frequency	Percentage
Cost centre	29	36.7
Profit centre	47	59.5
Revenue centre	3	3.8
No response	1	0.1
TOTAL	80	100.0

4.1.9. Subsidiary status

Twenty six percent of respondents state they are a subsidiary of a foreign parent. Sixty five percent state they are not a subsidiary of a foreign company and seven respondents left this question blank (Table 4.11).

Table 4.11**Subsidiary status**

Status	Frequency	Percentage
Subsidiary	21	26.3
Not a subsidiary	52	65.0
Missing	7	8.7
Total	80	100.0

4.1.10. Location of headquarters of parent company

Where there is foreign ownership, 58 percent of respondents indicate that the foreign parent is located in the USA. The second largest group consists of respondents that have a parent in France (10%). Respondents that had a parent firm located in Germany and the United Kingdom were 5.0 percent each of the total (Table 4.12).

Table 4.12**Location of Headquarters**

Country	Frequency	Percentage
USA	23	57.5%
France	4	10.0%
UK	2	5.0%
Germany	2	5.0%
Other	3	7.5%
Missing	6	15.0%
Total	40	100%

4.1.11. Nature of services exchanged

The kinds of services traded among departments are equally split between standardised and non-standardised. Standardised refers to delivery of services which is not customised to customer's individual requirements whereas non-standardised refers to services, which are delivered without customisation (Table 4.13).

Table 4.13**Nature of services exchanged**

Nature of service	Frequency	Percentage
Standardised	39	48.8
Non-standardised	38	47.5
No response	3	3.7
Total	80	100.0

Most of the services exchanged are simple services about which customers exhibit reasonable understanding of service's features and associated benefits. The remaining 32.5 percent of services are classified as 'complex', which are often found by customers as confusing and complicated. Customers typically display ignorance of the features and benefits of these services because they find such services very difficult to understand.

Table 4.14
Complexity of services

Nature of service	Frequency	Percentage
Simple	54	67.5
Complex	26	32.5
Total	80	100.0

4.1.12. External market for internally provided services

A large percentage of respondents (67.5%) indicate that there is no external market for the service they acquire internally, while 32.5 percent stated that there is an external market for the internally provided service (Table 4.15).

Table 4.15
External market for services

	Frequency	Percentage
External market exists	54	67.5
External market doesn't exist	26	32.5
Total	80	100.0

4.1.13. Evaluation of divisions

Most firms (79.5%) evaluate responsibility centres based on divisional results while only 16.3 percent use corporate results as a basis for evaluation (Table 4.16).

Table 4.16

Basis of evaluation of divisions

Basis of evaluation	Frequency	Percentage
Divisional results	62	77.5
Corporate results	13	16.3
Other	3	3.8
Missing	2	2.4
Total	80	100.0

4.1.14. Who sets transfer prices

Research clearly indicates that the locus of decision rests with headquarters when deciding transfer prices. Headquarters solely set transfer prices in sixty percent of respondent firms. In 27.5 percent of cases transfer prices are set jointly with headquarters and divisional management (Table 4.17).

Table 4.17

Who sets transfer prices

Who sets transfer prices	Frequency	Percentage
Headquarters alone	48	60.0
Divisional level alone	9	11.3
HQ and divisional management together	22	27.5
Missing	1	1.2
Total	80	100.0

One of the key findings of Arpan (1972) in his study of international intra-corporate transfer pricing was that the setting of transfer prices was the absolute prerogative of parent company executives regardless of parent's nationality. Therefore, the above findings, although they apply to domestic intra-company pricing, lend support to Arpan's (1972) conclusion. Eccles (1983) believes that in competitive organisations, headquarters should normally leave the determination of market prices to the business units involved.

4.1.15. The role of the chief financial officer (CFO) in setting transfer prices

It is evident that the chief financial officers play an important role in setting transfer prices. Eighty-one percent of respondents describe the role of CFO as quite important and very important (Table 4.18).

Table 4.18

Role of CFO in setting internal prices

Role of CFO in setting internal prices	Frequency	Percentage
Very important	21	26.3
Important	44	55.0
Neither important nor unimportant	14	17.5
Unimportant	0	0
Not important at all	0	0
Missing	1	1.2
Total	80	100.0

The result of this research is in contrast with Benke and Edwards (1980) who find that financial controllers play a relatively limited role in transfer pricing in most cases, being advisors rather than policy makers.

4.1.16. Review of transfer prices

Annual review of transfer prices appears to be the most common practice. Eighty-four percent of respondents reviewed transfer prices annually while 5.1 percent reviewed semi-annually and others accounted for 8.9 percent (Table 4.19).

Table 4.19

Frequency of transfer price reviews

Frequency of transfer price reviews	Frequency	Percentage
Annually	67	83.8
Semi-annually	5	6.3
Other	7	8.8
Missing	1	1.1
Total	80	100.0

4.1.17. Circumstances that prompt a change in transfer price

Table 4.20 shows that the strategic nature of inter-divisional trade (41.3%) is indicated as the most common reason to consider a change in transfer price or method. Changes in organisational structure and changes in market conditions came second and third, respectively, with 25.0 percent and 21.3 percent of firms favouring the practice.

Table 4.20

What prompts transfer price change

Circumstances that prompt a change in transfer price or method	Frequency	Percentage
Changes in organisational structure	20	25.0
Strategic nature of inter-divisional trade	33	41.3
Changes in the degree of transaction specific investment	6	7.5
Changes in market conditions	17	21.3
Other	3	3.8
Missing	1	1.1
	80	100.0

For manufacturing firms, Eccles (1983) finds that the changes in market conditions of the transferred good and changes in the price of raw material used to make the transferred good are the two most important factors that determine the timing of transfer price changes.

4.1.18. Objectives of transfer pricing system

Respondents' ranking (on a five-item Likert scale) of their objectives of the transfer pricing system is shown in Table 4.21.

Table 4.21**Transfer pricing objectives – ranking by importance**

Objectives of transfer pricing	Very Important (%)	Quite Important (%)	Neither important nor Unimportant (%)	Of little Importance (%)	Not Important (%)
Ease of understanding	41.6	39.0	18.2	7.0	0
Divisional evaluation	24.3	45.9	20.3	4.1	4.1
Goal congruence	33.3	40.6	20.3	2.9	2.9
Managerial motivation	6.3	36.5	42.9	11.1	3.2
Optimal pricing	44.0	36.0	13.3	4.0	2.7
Greater divisional autonomy	4.5	16.4	46.3	25.4	7.5

Table 4.22 shows the descriptive statistics associated with respondents' answers to questions dealing with transfer pricing objectives

Table 4.22**Transfer pricing objectives - descriptive statistics**

	Mean	Std. Deviation
Ease of understanding	1.8846	1.12793
Optimal pricing	2.0390	1.49949
Goal congruence	2.3056	1.69206
Divisional evaluation	2.4342	1.65195
Man motivation	2.9697	1.57841
Divisional autonomy	3.1493	0.94153

1=Very important, 5= Not important

As reported in Tables 4.21 and 4.22, the “ease of understanding” is the most important objective of the transfer pricing system followed by optimal pricing and goal congruence. Transfer pricing policies normally aim to achieve goal congruence (Abdallah, 1989; Plasschaert, 1979) which can be described as the situation where the goals of the divisional manager coincides with those of the firm as a whole.

Table 4.23

Comparison of transfer pricing objectives reported under selected studies

	Current Research (2006)	Elliott (1998)	Mueller et al. (1997)	Alam and Hoque (1995)	Grabski (1985)	Benke and Edwards (1980)	Tang (1979)	Fremgen (1970)
Ease of understanding	1	2		2		3		
Optimal pricing	2							
Enhancing goal congruence	3		3		2	1		
Divisional evaluation	4		2	1		2	2	2
Managerial motivation								4
Preserving divisional autonomy					1			
Communicating information that results in desirable decision making by managers			1					
Profit maximisation		1					1	1
Evaluation of divisional manager's performance				3				3

A good transfer pricing scheme is typically devised so as to maximise total corporate profit and encourage cooperation among units. Evans (1975) suggests that the transfer pricing process should minimise executive time spent on transfer price disagreements and keep the accounting burden to a minimum.

From that perspective, it is understandable why the ‘ease of understanding’ is considered to be the most important objective. It is also argued that heterogeneity of internal services may make monitoring and control of those activities by senior management particularly difficult.

Unless the company acknowledges the importance of internal customers, these internal intermediaries may have different goals, incentives and motives from the department developing the service (Zeithaml and Bitner, 2003).

Consequently, employees involved in the internal service delivery, even those who wish to be good stewards, may inadvertently set goals that would be different from those set if information flowed perfectly (Evans, 1975). Almost half of the respondents (48.8%) indicate that divisional goals are not consistent with overall corporate goals.

4.1.19. How firms decide if transfer pricing objectives have been achieved?

Most firms (37.5%) state that they have no formal procedures to establish if the transfer pricing objectives have been achieved. Only 26.3 percent of respondents indicate they had formal procedures designed specifically for this purpose. Almost a quarter of respondents (22.5%) use their intuition to see if the transfer pricing objectives set have been attained. Five percent of respondents do not believe it is important to explore this relationship.

Table 4.24

Procedures to determine achievement of transfer pricing objectives

	Frequency	Percentage
There are formal procedures designed for this purpose	21	26.3
There are no formal procedures	33	37.5
Through intuition	18	22.5
Do not believe it is significant to explore this relationship	4	5.0
Other	4	5.0
Total	80	100.0

4.1.20. Transfer pricing methods used

The current research findings are summarised in Table 4.25. The most popular transfer pricing methods are full cost at standard, full cost plus and market-based current cost.

Table 4.25**Mostly used transfer pricing bases – current study**

	Always used (%)	Frequently used (%)	Sometimes Used (%)	Rarely used (%)	Never used (%)
Variable cost at standard	0	20	6.7	26.7	43.3
Variable cost at actual	17.6	20.6	11.8	20.6	29.4
Variable cost plus	0	23.3	0	30.0	46.7
Full cost at standard	10.6	46.8	23.4	8.5	10.6
Full cost at actual	9.1	29.5	38.6	9.1	13.6
Full cost plus	9.3	41.9	27.9	2.3	18.6
Market based current	5.4	33.9	33.3	12.5	14.3
Market based adjusted	0	23.1	3.8	7.7	65.4
Negotiated	4.9	16.4	55.7	16.4	3.3
Other	1	0	0.5	0	0

A comparison of current research results with selected major transfer pricing studies is shown in Table 4.26. The use of different scaling techniques by many authors makes comparison among studies difficult. What is noteworthy here is that the research results presented in Table 4.26 are consistent with Zeithaml *et al.* (1985) who find that service firms prefer cost-oriented pricing. Mills and Sweeting (1988) also survey 42 service companies in the UK and concluded that most service firms (68%) chose cost-based pricing methods. Cost-plus pricing is by far the most widely used pricing strategy (Diamantopoulos, 1991; Bonoma *et al.* 1988). Analysis of Table 4.26 demonstrates that most commonly used transfer pricing strategies are cost-based with the “full-cost plus” method being the most popular. It should be noted, however, that all except the current research above research findings focus on manufacturing organisations.

Table 4.26

Transfer pricing methods used

	Current Research (2006)	Alam and Hoque (1995)	Drury <i>et al.</i> (1993)	Tang (1992)	Jaye and Blayney (1991)	Bafcop <i>et al.</i> (1991)	Mehafdi (1990)	Mostafa (1982)	Tang (1981)	Chenhall (1979)	Tang <i>et al.</i> (1979) US firms	Tang <i>et al.</i> (1979) Japanese firms	Vancil (1979)	Tomkins (1973)	Rook (1971)
COST-BASED				46.2%	65.0	70 %	36.3%	34.1 %	62 %	51.9 %	50.4 %	46.2 %	46.8 %	45.4 %	46.1 %
Variable Cost				7.7%						5.8 %			4.6 %	6.8 %	4.7 %
Variable cost at standard	20.0 %	6.6 %	20.0 %			15.1 %			1.8 %		3.0 %	0.8 %	2.9 %		
Variable cost at actual	38.2 %	3.3 %	38.2 %						4.3 %		0	0	1.7 %		
Variable cost plus	23.3%	0	21.9 %	0.9 %		6.1 %	6.1 %	7.3 %	1.8 %	3.8 %	0.9 %	0.9 %		13.6 %	
Full Cost				41.0 %				9.7 %	18.4 %	21.1 %			25.5 %	6.8 %	46.1 %
Full cost at standard	57.4%	37.8 %	56.2 %	25.8 %		36.4 %	15.1 %		12.9 %		16.8 %	15.1 %	12.5 %		28.5 %
Full cost at actual	38.6%	14.8 %	39.8 %	9.0 %		27.3 %		2.4 %			9.0 %	9.2 %	13.0 %		17.6 %
Full cost plus	51.2%	8.2 %	50.0 %	16.6 %		9.1 %	15.1 %	7.3 %	22.7 %	21.1 %	19.0 %	20.2 %	16.7 %	18.2 %	
MARKET BASED		18.2 %		36.7 %	13.0%	9.1	45.5 %		50.3 %		1.7 %	0			
Market based current	39.3%	11.5 %	38.6 %	42.4 %		3.0 %	27.3 %		38 %	50.3 %	31.5 %		31.0	47.7%	53.9 %
Market based adjusted	23.1%	6.7 %	21.4 %	7.6 %		6.1 %	18.2%		2.3 %	38.0 %	21.6 %	17.7 %			22.3 %
Other market based				4.0 %						12.3 %	8.2 %	16.0 %			31.6 %
NEGOTIATED	21.3%	11.6 %	20.7 %	16.6 %	11.0%	12.1 %	42.4 %		27.6 %	33.3 %	18.1 %	19.3 %	22.2 %	21.5 %	16.1 %
Other	9.4%		14.3 %	0.5 %	11.0%	9.1 %			7.4 %	9.5 %	1.7 %	1.0 %		4.5 %	

Therefore, one-to-one comparison may not be too meaningful, and these results should be taken as an indication that service companies also favour cost-based methods, although the literature is replete with articles opposing the use of cost-based transfer pricing. Benke and Edwards (1980) label the arbitrary nature of the mark-up as one of the key disadvantages of cost-plus transfer pricing systems. In response to a question as to how they decide to charge, the business manager of Company F refers to an example and comments “They (*internal buyers*) made a very high profit last year, therefore they could afford to pay a higher price” which supports the arbitrary nature of implementation of cost plus pricing in that organization”.

Morris and Fuller (1989) find that cost-based prices are not significantly influenced by marketer’s understanding of customers and competition and consequently are not suitable for competitive organisations. Drury and Tayles (1995) claim that conventional wisdom should reject the use of full costs. Despite criticisms against the use of cost-based transfer pricing, some authors attempt to explain the reasons that underlie the unwavering popularity of this pricing method. Harrison and Wilkes (1975) claim that managers are more likely to choose cost-plus pricing where they have no information about demand.

Colbert and Spicer (1995) explain that at higher levels of asset specificity internal transactions will be more customised, and consequently, it will be very difficult to find prices in external markets which can be used for transfer pricing and as a result transfer prices will be based on cost.

Despite criticisms directed at cost-based transfer pricing methods, they continue to be the favourites of both manufacturing and service businesses. There have been no attempts to find out what lies behind the companies' choice of cost-based transfer pricing methods, and empirical research is needed in this area.

The comments made during the interviews, however, shed some light on why cost-based systems are still favoured. The statements given below clearly indicate that particular cost centres' aim is to find ways to charge their entire budget to other departments to ensure full utilisation of their departmental resources. For example, divisional manager of Company B states:

"I only ever charge to internal customers.... so the way the department operates is. Aaah, we look at total compensation for all my employees including my salary, salaries and benefits, we look at training, we look at annual leave. Eeeeh, we look at all the travel and living that we will incur. I get my budget. For example, \$30 million dollars and then we work out how many workable hours there are. And we come up with an hourly rate. So effectively, as my people are working on projects charging other internal departments, I recover that money back into my department every month. And I should end up with zero. Whatever the cost of the company to employ us I need to bring the same money back from other departments....I purely need to recover all the money that the company spends on having me there."

Ward (1993) warns that there is no incentive for the internal service departments to improve their own financial performance, if they know that their total costs, whatever they are, will be charged out, through the transfer prices, to their customers who must buy their services. In the case of company A, evidently the cost-based system benefits the interviewee's division because it enables him to charge almost arbitrarily all his costs to buying departments. As Mills and Ungson (2001) report prices play an important role in allocating scarce services among the various internal customers. Theoretically, a price indicates how much an internal customer is willing to give up for the use of a service or how much the service provider or unit is willing to accept for producing the service. These allocations are frequently based on budgeted or actual costs and such costs act as surrogate prices in assisting the organisation in the allocation of their service resources.

Inspection of Table 4.27 which shows transfer pricing methods used between responsibility centres, reveals that even the nature of the responsibility centre, including profit centre to profit centre trade, hardly affects the popularity of cost-based transfer pricing. Galway (1980) draws attention to another disadvantage that might result from using cost-plus methods when an intermediate good is transferred through many divisions until it reaches the last division in the chain. In this situation, the last division in the chain which sells the finished product/service to the external customer has to pay a transfer price to its predecessor which includes the cumulative mark up which ultimately influences its ability to compete in the market if it has to cover its cost. During the interviews, particularly in the case of telecommunication firms, there was a concern among managers who are working directly with external customers that quotations based on cumulative cost-based transfer prices have the potential to render their bid uncompetitive, sometimes resulting in loss of business.

Table 4.27**Transfer pricing systems employed between responsibility centres**

	Cost Center to Cost Center	Cost centre to profit centre	Profit centre to cost centre	Profit centre to profit centre	Cost centre to revenue centre	Revenue centre to cost centre	Revenue centre to revenue centre
Variable cost at standard	13%	10.8%	9.8%	7.0%	11.1%	11.5%	13.0
Variable cost at actual	10.9%	10.8%	6.6%	7.0%	3.7%	3.8%	4.3%
Variable cost plus	4.3%	4.6%	3.3%	5.3%	3.7%	3.8%	4.3%
Full cost at standard	23.9%	21.5%	26.2%	17.5%	29.6%	26.9%	26.1%
Full cost at actual	19.6%	20.0%	11.5%	8.8%	11.1%	11.5%	13.0%
Full cost plus	19.6%	20.0%	26.2%	29.8%	25.9%	23.1%	21.7%
Market based current	6.5%	10.8%	13.1%	15.8%	11.1%	11.5%	13.0%
Market based adjusted	-	-	1.6%	3.5%		-	-
Negotiated	-	-	-	3.5%	-	-	-
Standard variable cost + CM	2.2%	-	-	-	-	-	-
Other	-	1.5%	1.6%	1.8%	3.7%	7.7%	4.3%
TOTAL	100%	100%	100%	100%	100%	100%	100%

Moreover, the cost-based pricing does not reflect customer perceived value as there is hardly any incentive for unit managers to be concerned about providing value to the internal customer. Cressman (1999) argues that costs alone cannot identify the correct pricing strategy as they do not reflect the value delivered to customers.

Since pricing represents the means through which managers reap reward for implementation of the market concept as long as pricing practice is internally focused, managers are unlikely to be paid for delivering value to target customers. This is particularly the case where transfer prices are mandated and internal buyers are not free to source their requirements from external suppliers. This survey reveals that only 10 percent of respondents indicate they are free to outsource. The value-based pricing is one of the several pricing methods available for price setters where the supplier attempts to ascertain what customer needs and value perceptions are and then sets the price accordingly.

Fremgen (1970) argues that freely negotiated transfer prices are the most logical general prices to use within a decentralised corporation that seeks to provide profit motivation for its division managers. Empirical evidence, however, shows that negotiated transfer prices are not as popular in practice as they are in the literature.

As regards negotiation, the divisional manager of Company B remarks:

“What is important for these people (*internal buyers*)? It's always the price. Okay. They will always comeback and ask me to sharpen the pencil. At the same time, let's be a bit realist. As I said we do a lot of model work we have done that job before for those hours and for those costs successfully. We should be able to apply the same model. Some of the questions come up about the efficiency of the department. To say you have done it before, can't we do it smarter the next time and reduce your actual service costs. So they are up to negotiations we get into. Yes, we can reduce costs based on internal efficiency, internal improvement, lessons learnt, and professional process. But the only way the price can come down is how our policy to be more efficient. That is not the only variable in the price construction. Our policy is to do the job in fewer hours.”

Another divisional manager (Company B) states that

“Our priority is to get the business at quoted price. Then the negotiation starts with the company to sell this at a margin. So, obviously from the top down sales people will hold you cannot go under a particular margin. So in these costs, targeting too high in the margins coming down when the negotiation starts back to me to see if I can reduce my costs. So, to maintain that margin is too complicated.”

A divisional manager's (Company J) approach is also similar who states that

“Competition drives down prices so they endeavour to win tenders sometimes with very narrow margins. Then they instruct internal divisions how much each task should cost, also if we think the margins are too low, we will then go back and sit down and say we are being totally uncompetitive here.”

Finally, the results presented here are seemingly at odds with Govindarajan and Shank (1992) who argue that for intermediate value activities, revenues should be assigned by adjusting internal transfer prices to competitive market prices. No trend is discernible from Table 4.26 and 4.27 with regard to the adoption of market-based transfer prices, although logically, market-based prices should be used especially where the trading departments are profit centres and transfer prices are not mandated.

Buyers judge prices comparatively through the anchoring effects of reference prices (Monroe and Cox, 2001). Sixty-two percent of respondents indicated they use reference price as a yardstick to evaluate an internal price. Hiebeler, Kelley and Kettelman (1998) highlight the confidential nature of much of the desired information and stress the difficulties that are likely to be faced in acquiring benchmarking information about other firms.

It is essential that firms examine their costs and performance in each value creating activity and compare their results with the benchmark. Hiebeler, Kelly and Kettelman (1998) add that in the absence of benchmarking information, competitors' costs should be estimated and used for benchmarking purposes. Sixty-eight percent of respondents state that when intra-company pricing is determined through negotiations between two divisions, generally they have access to full data on alternative sources and markets and to public and private information about market prices.

The telecommunication company managers, in particular, report that it is common practice to use as a reference price, the price charged for similar tasks completed in the past. They indicate they usually do not have any knowledge about the cost of activities performed by their competitors. It is considered that the complex nature of many of the services they provide is responsible for the absence of external benchmarking information. Absence of external benchmarking in telecommunications firms is supported by Harmon, Hensel and Lucas (2006) who propose the use of internal benchmarks instead of external, because external benchmarks refer just to samples of data with little explanation behind them. It is also argued that external benchmarking would compound the internal difficulties that service companies face. For example, a measure such as costs per unit of information processed; some companies include allocated costs, others do not. Therefore, internal benchmarks deliver more detailed metrics allowing a company to find its own best metrics.

Schmidt (2002), however, argues that service companies outside the professions such as companies in the hospitality and airline industries track their competitors' prices extremely closely. The professional services firms, however, tend to rely on a mish-mash of gossip from clients, information from partners who switch firms and leaked snippets from tender documents.

Business units using internal services, have few incentives to compare the value they receive with the costs to the company because the costs of each purchase decision are spread out across all business units in the company through the overhead allocation. (Halal, Geranmayeh and Pourdehnad, 1993). Almost forty-nine percent of respondents believe that the methods used in calculating internal prices are not straightforward and are not easy to understand with 22.5 percent undecided.

The issue of transparency is also raised by Mills and Ungson (2001) who claim that determining the worth of internal services is a problem because assessing the correct value or price of employees engaged in these activities is not transparent. The lack of transparency is attributable to the organisational design that underlies hierarchies and gives insufficient attention to the unique features of service activities performed by knowledge-based workers that merit new coordination and integration requirements. The intangibility of services makes it more difficult to differentiate or allocate value added to these services.

4.1.21. Rationale for multiple transfer prices

Tang (1992) reports that ninety-two percent of firms used at least one transfer pricing method to account for their interdivisional transfers.

Table 4.28

Single versus multiple transfer price

	Present Research	Tang (1992)	Chenhall (1979)	Tomkins (1973)
Single method	12.5%	8%	89.6 %	73%
Multiple method	87.5%	92%	10.4 %	27%

In this survey, the majority of the respondents that use more than one transfer pricing basis indicated that the reason behind using multiple transfer prices is involvement of different responsibility centres (53.4%), different products (30.1%) and different locations (8.2%).

Table 4.29

Rationale for using multiple transfer pricing bases

	Frequency	Percent
Different products	22	31.4
Different responsibility centres	39	55.7
Different locations	6	8.6
Product life cycle	0	0
Other	3	4.3
Total	70	100.0

4.1.22. Transfer pricing conflict

Conflict is defined by Pondy (1967) as an attitudinal construct - the 'affective states' of the people involved. Lambert (1979) believes that one of the central objectives of transfer pricing, 'facilitation of the evaluation of divisional management", contains the seeds of conflict.

The full cost and variable cost methods are at odds with the goal congruence objective of transfer pricing (Crompton, 1972), and, therefore, the use of cost-based methods are likely to give rise to conflict. Ackoff (1993) associates transfer pricing to the surrogate for market pricing in a centrally planned and controlled economy which produces intense internal conflict. Similarly, Spicer (1988) claims that the presence of internal transfer of goods or services and related sourcing and pricing decisions leads to inter-divisional conflict.

Internal customers derive utility from the services delivered. The utility to the supplying division, however, is derived from the provision of service. Mills and Ungson (2001) report that inherent conflict within internal market structures may result from the indirect involvement of employees with value. Because what is consumed by the internal customer is mostly intangible and directly related to the level of service effort; the internal service provider may be guided to minimise the cost of his/her effort whereas the internal customer, in turn, may be interested in maximising his/her consumption. Fama (1980), on the other hand, argues that such potential conflicts may be mitigated because in a competitive environment, other units or individuals will exert pressure to provide low cost performance. Drucker (1985) paints a rather dark picture about inter-divisional relationships arguing that corporate units usually have much more cooperative relationships with their external suppliers than with their internal sources of goods and services. Consistent with the above mentioned literature, the current research reveals that almost 90 percent of respondents experience some kind of conflict emanating from transfer pricing. At the corporate level, thirty-four percent; and at the divisional level, twenty-nine percent of respondents state they experience transfer pricing conflict frequently. It is evident that eighty-nine percent (Table 4.30) encounter frequent or occasional conflict. Table 4.30 summarises differences between the responses obtained from corporate staff and divisional staff.

Table 4.30
Frequency of transfer pricing conflicts

	Corporate (%)	Division (%)	Difference (%)
Yes, frequently	34.2	28.8	5.4
Yes, occasionally	55.7	60.0	4.3
No, never	8.9	11.2	2.4
Missing	1.2	-	1.3
TOTAL	100	100	

Differences between divisions and corporate staff are very similar. Twenty-nine percent of respondents indicate they are either very dissatisfied or dissatisfied with the present transfer pricing system and a further 28.8 % being neither satisfied nor dissatisfied.

Table 4.31

Satisfaction with the current transfer pricing system

	Frequency	Percent
Very satisfied	7	8.8
Somewhat satisfied	26	32.5
Neither satisfied nor dissatisfied	23	28.8
Somewhat dissatisfied	21	26.3
Very dissatisfied	3	3.8

The figures given in Table 4.31 relating to dissatisfaction levels with the current transfer pricing system support Larson (1974) who claims that conflict may be attributable to dissatisfaction with the company's transfer pricing policy.

A manager (Company A) in a service multinational reports they lose some business opportunities because their price is not competitive owing to internal overcharging. Another manager (Company A) of a revenue centre, however, indicated that they have not lost a contract because of overcharging. Because, he states

“There has been an instance where our customer has come back to us saying that we don't accept your price, you are too expensive with your support cost and maintenance, and services cost, so go back and review your price. We haven't lost them, but they have come back and said we are not accepting, go back and review it.”

4.1.23. Nature of conflicts

The majority of respondents (52.2%) states that opportunistic behaviour is the major reason that causes conflicts. The second most common reason is negative motivation to reduce costs (32.8%). As Table 4.32 shows, other conflict issues are raised by relatively smaller percentage of respondents.

Davis (2003) reports that conflicts arise from internal transactions because support units do not always provide the desired level of service to other units when needed. Further, Davis (2003) believes that it is the responsibility of senior management to make certain that the right services are provided to the right people at the right price. Using a mail survey, Lambert (1979) finds that the reported level of inter-divisional conflict is increased where the transfer pricing system is seen as affecting the customer division's profits. Lambert (1979) also contends that the other major factor affecting inter-divisional conflict is whether or not the customer division is permitted to purchase materials that are internally available from another division from outside the firm. Although it is argued that some conflict may be helpful, Walton and Dutton (1969) reason that if either division appears to enjoy an advantage from transfer pricing, one of the basic reasons for decentralisation to motivate and evaluate divisional personnel is subverted. Conflict relationships indirectly affect performance. Given the increasing pressure to do more with less, declining levels of trust and disharmony between decentralised sub-units can evolve into outright conflict (Hodgetts, 1996).

Table 4.32**Nature of conflicts**

	Corporate		Division	
	Frequency	Percent	Frequency	Percent
Opportunistic behaviour	35	52.2	27	37.5
Negative motivation to reduce costs	22	32.8	18	25.0
Perceptions of hostility between departments	3	4.5	2	2.8
Restricted flow of information	2	3.0	7	9.7
Lack of trust between departments	3	4.5	7	9.7
Dissatisfaction with the company's internal pricing policy	N/A	N/A	8	11.1
Others	1	0.5	3	4.2

The divisional Manager of Company B describes a typical conflict situation as follows:

“The biggest conflict I had if I can probably show here. We have a project team who works directly to a sales account. And the inputs that the project management will require will come from the likes of engineering, my team which we call ourselves verification or verification office we have installation and commissioning. And they also obviously need to see the actual hardware costs. We look at the product and typical services to implement that to come up with an internal cost. If it is going to cost more than 1000. These teams vary in size. So we could have twenty there, ten there, fifteen there. They work the same ways that I do in terms of they are a zero cost to the company. They recover. So I could be \$ 100 an hour, this guy could be 70 dollars an hour and this could be 65. So the conflict arises here as to why I am so expensive. So this is the conflict so far. I just say we provide the premium service”.

An account manager (a profit centre) of Company B states:

“There are conflicts all the time. As I said one of the biggest problems we have had is that they always overcharge. There is always a conflict in there. A lot of times, we will escalate problems to management and say ‘if your services and operations area is going to demand the prices and costs at that level, then we are not going to be able to do business with this project. So,... there is always conflicts.”

Another divisional manager (Company J) adds:

“There are many conflicts due to internal pricing mainly because not all organisations within our company are aligned to deliver value to the customer. This is as a direct result of internal service providers having organisational metrics which are in direct conflict with delivering value to the customer. For example, most internal service providers are required to increase the amount of revenue and margin for a particular service that they sell. However, the internal service providers have absolutely no control on how much of their services are sold as they are not involved in sales. Therefore, the only level of control that they have is the pricing that they put on the table. If the internal service provider needs to increase the revenues associated with his service but cannot control the sales funnel, he is forced to bump up pricing. He is not necessarily delivering a better service or more value to the customer. He is simply trying to satisfy an internal organisational metric which has little to do with delivering customer value.”

Another source of conflict cited is capacity utilisation on which he comments:

“The internal service providers are put under intense pressure by management to ensure that their organisations are 95 percent utilised. However, given that they have no control over how much work is required of them as they do not control sales or the project funnels, their only response is to ensure that resources take longer doing certain tasks than they ought to.”

According to Jensen and Meckling (1976), agency dilemma occurs when employees or units in the internal service have more information and knowledge about their activities necessary to fulfill their contractual obligations than do their internal customers. This may be true particularly for complex services about which buyer's knowledge is relatively limited. In a similar vein, Williamson (1993) notes that tacit knowledge (experience-based information that is tied to an individual or group and that cannot be easily communicated) contributes to information asymmetry and, in turn, encourages opportunistic behaviour. The current research reveals that opportunistic behaviour is the most frequently encountered type of transfer pricing conflict. But it is not yet known if development of the opportunistic behaviour can be explained by information asymmetry. Some authors (Ackelsberg and Yukl, 1979; Chalos and Haka, 1990) also see it essential that the information asymmetry is reduced.

4.1.24. Resolution of conflicts

The current survey results show that conflicts arising from transfer pricing are mostly resolved through negotiation between relevant divisions (49.3%). The second most common method of conflict resolution is top-down imposition of a solution (41.1%).

Principal-agent and game theory approaches to conflict resolution assert that participants are motivated by rational expectations of monetary returns vis-à-vis their influence on individual group utility functions. Cooper and Slagmulder (1998) argue that using activity-based costing should lead to a significant reduction in intra-organisational conflicts about cost assignments.

Table 4.33

Conflict resolution methods

	Frequency	Percent
Forcing a solution	30	41.1
Smoothing	0	0
Negotiations between the divisions involved	36	49.3
Problem solving	1	0.5
Arbitration committee	0	0
There is no formal process	6	8.2
No answer	7	
	80	

Dean (1955) argues that the disputes should be resolved between the parties without a mediator. This research indicates that in majority of the cases parties resolve conflicts between themselves. On the other side of the argument, Dearden (1960) believes that top management involvement should be sought which happens to be the second most popular method companies use.

Lawrence and Lorsch (1967) find that the successful firms facing uncertain environments were able to resolve effectively inter-departmental conflict and the most important means of resolving this conflict is confrontation (negotiation). For Eccles (1985) negotiation offers the opportunity to clarify strategic ambiguities or to allow the best poker player to win.

The manager of a revenue centre (Company B) at one of the multinational firms interviewed described their conflict resolution process as follows:

“Conflicts are usually resolved by getting together in meetings and discussing the implications of keeping those costs or reviewing the options we have in delivering the same services and that may be going to a cheaper cost base. Sometimes, we have threatened them, instead of using people in Australia we will grab people from Singapore.”

4.1.25. Use of activity-based costing (ABC)

Kaplan (1994) stresses that ABC would be appropriate not only to analyse manufacturing overhead costs and influence product design decisions but also for assigning marketing, selling and distribution costs to customers, business segments and distribution channels. Further, ABC would enable firms to assign accurately organisational costs throughout a company's value chain to their underlying causes; products, customers, channels and organisational units.

Pricing is considered an important motive for those considering the adoption of ABC (Innes and Mitchell, 1991). With reference to valuing inter-divisional trade, Emmanuel and Mehafdi (1994) suggest that ABC would be useful especially if a longer term perspective is taken. There seems to be an agreement that ABC would be an ideal tool to allocate costs to activities in an accurate manner. The main issue, however, seems to lie in its slowly progressing adoption rates. There are isolated examples of potential use of ABC in banks (Sharma, 1992) and transportation (Bremser and Licata, 1991). This research shows that almost 92 percent of the respondents did not use ABC while only just over 7 percent used ABC for costing (Table 4.34).

Table 4.34**Adoption of ABC**

	Frequency	Percent
Use ABC costing	6	7.6
Do not use ABC costing	73	92.4

Innes and Mitchell (1991) surveyed 439 UK companies listed in the Times 1000 (1994) and revealed that the ABC adoption rates for manufacturing and non-manufacturing sectors was 19.5 percent and 18.9 percent, respectively.

Drury *et al.* (1993) report that approximately ten percent of responding manufacturing organisations had implemented ABC. Bain & Company's (2005) survey of 700 respondents world-wide reveals that activity-based management's adoption level stand at 52 percent which was below the mean. A study by Shim and Sudit (1996) shows that 27 percent of respondents adopt ABC. Banerjee and Kane (1996) survey a sample of Chartered Institute of Management Accountants (CIMA) members and show that 22 percent use ABC. Evans and Ashworth's (1996) survey among UK manufacturing companies shows ABC adoption rate at 21 percent. A US study by Hrisak (1996), however, reports a relatively higher (53%) ABC adoption rate.

Green and Amenkhienan (1992) point to a significant gap between innovations in manufacturing and innovations in management accounting, and firms to a large extent continue to rely on outmoded accounting methods. The following comments of a project manager (Company J) add weight to Green and Amenkhienan (1992):

“The main reason this happens in my view is that the company is too slow to change with our customers and the business requirements. Most of these metrics are there due to legacy of accounting standards and management theories which are simply not relevant in today’s business environment. Any good manager knows that you have to swing the metrics to suit the business environment, otherwise where you want to take the business is held to arrest with metrics that bring forth behaviours in managers which are not aligned to the goals of the business but the goals of the sub-organisations, which is utterly pointless.”

Empirical results presented in this section demonstrate that adoption of ABC by businesses is still low and is moving rather slowly. This finding is in line with Anderson and Narus (1995) who claim that although existing activity-based costing techniques have largely been applied to the measurement of manufacturing and product-related costs, and little work has been done to apply them to services. Anderson and Narus (1995) attribute the low adoption rate of ABC to the following reasons: (1) most managers rarely define concretely what constitutes a particular service and its various levels, and because of its fuzzy definition it is difficult to track which customer got what service and allocating related costs; (2) accounting systems at many companies allow sales forces to foist service costs on other departments; and (3) many companies are organised around products rather than around market segments or customers. As a result they can readily break down costs on a product by product basis but cannot aggregate product and service costs on a segment-by-segment or customer-by-customer basis. Bromwich and Bhimani (1994) claim that the low take-up of activity-based costing systems may be due to the relatively small set of overhead cost that are non-volume-based and that can be more accurately measured by ABC systems.

The relatively low level of adoption of ABC costing has the potential to affect fair allocation of overheads. Cooper and Slagmulder (2005) argue that ABC costing provides incentives for service departments to perform their tasks more efficiently and the charges are accurate and transparent under ABC costing. Further, activity-based costing can produce precise and transparent transfer prices. With very low adoption rates, at the present, it is evident that many firms do not possess the capability to trace costs to specific activities. Cutting overhead costs appears to be a major concern for respondents. About 79 percent place emphasis on cutting overhead costs while 10 percent either disagreed or strongly disagreed with this objective. Eleven percent were undecided.

4.1.26. Allocation of overheads

In management accounting, the question of cost allocation is a contentious issue. Cost allocation arises whenever goods or services are transferred, or deemed to be transferred, and a charge is levied on the recipient for the benefit. Fremgen and Liao (1981) refer to the “ability to pay rule” as in income taxation schemes, that tends to penalize individuals and managers who expend greater effort in securing higher income or profits. The most prevalent method of overhead allocation is using apportionment as a base (67.9%) and the remainder of (32.1%) employ ‘actual use’ as a base (Table 4.35).

Table 4.35
Allocation of overheads

	Frequency	Percent
Actual use	25	32.1
Apportionment	53	67.9
Negotiation	0	0
No answer	2	0

In answering the question relating to purchases of internal services, the divisional manager of a multinational company interviewed (Company B) stated:

“What will happen is once a project gets approved, all these service areas will charge their time against that particular project. So all their costs are covered with the cost of sales associated with that particular product. They use what they called loaded labour rate, which is decided by the headquarters, and cost centres quote the time it takes to perform a given task. Thus the total charge becomes the product of loaded labour rate and total number of hours.”

He also added:

“I will charge a fixed rate. I am a cost centre. I have a zero budget. When I say a zero budget everything I spend. “

The Chief Financial Officer of a major advertising multinational firm (Company F) complained about the exorbitant overhead allocations made each year by their headquarters which seriously affect their bottom line for a long time.

The effects of internal pricing systems are directly related to the efficient allocation of services within internal markets. The pricing system regulates internal services by determining the value of employees' or units' directed efforts along with the cost incurred. One way to think this issue through is to ask what is valued the most about one's product and services (Mills and Ungson, 2001). Customary accounting practice charges business units for centrally-provided services through arbitrary allocations of overhead expenses. Under this system, the top management of companies determines the amount to be spent for activities (Halal, Geranmayeh and Pourdehnad, 1993).

Pinchot and Pinchot (1993) argue that companies that fund and provide support services through a centralised bureaucracy exhibit some of the same maladies as centrally-planned economies. The managers of most business units within corporations do not know what their total costs are. In particular, they seldom know how much capital they employ and what the cost of capital is. Their cost of capital is usually hidden in costs allocated to them from above. Allocated costs are sometimes as high as 40 percent of total unit costs (Ackoff, 1993). Certain costs are extremely difficult to allocate to certain individual products, but they are the costs of activities, which are very significant in relation to total quality and competitive advantage (Johnson and Kaplan (1987).

Davis (2001) claims that most companies allocate overhead costs back to user departments on a formula basis, such as headcount, percent of direct labour dollars, or percent of company sales. As a result, most user divisions or departments pay the same amount regardless of how much they use the service. Thus, the service department has little incentive to save money or to adapt the services it offers to fit internal customer needs.

Cooper and Slagmulder (1998) assert that corporate support costs are allocated to the operating units using a 'peanut butter' approach that spreads these costs in arbitrary ways. The outcome of such a simplified approach is both low accuracy and zero transparency. Transparency ensures both sides understand the source of those costs. Accuracy ensures that costs are identified and transferred properly. At least part of the issues encountered in relation to overhead allocation may be attributable to the low adoption of ABC by service organisations. The overwhelming majority (78.8%) of respondents stated that control of overhead costs is important for them (Table 4.36).

Table 4.36

Control of overhead costs

	Frequency	Percent
Strongly disagree	2	2.5
Disagree	6	7.5
Neither agree nor disagree	9	11.3
Agree	24	30.0
Strongly agree	39	48.8

Firms that deliver superior value secure loyal customers and, in turn, reap favourable firm-level outcomes in terms of higher revenues, lower churn and less overhead costs (Reichheld, 1996).

4.1.27. Out-sourcing

Managers should be permitted to choose the alternative that is in their own best interest and the selling manager should be free to sell outside (Anthony and Govindarajan, 1998). An internal supplier's failure to meet deliveries as contracted may eventually affect the performance of the last department in the chain; to the external customer (Walker, 1988).

Approximately 24 percent of respondents report that they have service level agreements (SLA) to govern internal transactions. In addition, about 70 percent of respondents believe that using internal services carried high risk. Only 21.5 percent of respondents agree and strongly agree that they have one of the best warranties in the industry. Butz and Goodstein (1996) argue that internal providers are too often seen as over-priced, unresponsive producers of shoddy services and goods, the ones that do not provide net customer value. Cross charges, especially when these charges are non-competitive with the external market place, heighten these negative sentiments, and such dissatisfaction might fuel the growing trend toward out-sourcing.

4.1.28. Freedom to out-source internally provided services

Divisions of only a very small proportion (10.4%) of service firms are free to out-source their internally available requirements from external suppliers.

In the majority of firms (67.5%), divisions are required to obtain the approval of management before they can out-source. About 22 percent of respondents report that they are not allowed to buy from outside suppliers (Table 4.37)

Table 4.37

Freedom to out-source

	Frequency	Percent
Domestic divisions are completely free to outsource	8	10.4
Out-sourcing is subject to approval	52	67.5
Out-sourcing is not allowed	17	22.1

Ward (1993) points to the fact that in many companies internal customers of the internal service departments have no choice about using the service and no ability to negotiate on the transfer price. He also adds that where buyers have no choice there is no need for a transfer pricing system. Ward (1993) also draws attention to the demotivating effect on managers who are forced to buy internally, particularly if they are held accountable for the subsequent recovery of these arbitrary, non-negotiable transfer prices in their own external sales revenue.

In a survey of UK manufacturing companies, Drury *et al.* (1993) find that 68 percent of firms state that their domestic divisions are free to out-source and 32 percent of them are not allowed to outsource goods or services internally available from another division within the same company. Where the buying division is allowed to buy from outside the group, it is found that 38 percent of the respondents indicated that approval from central headquarters is required.

In the current study, corporate management's response to this question hardly differs from that of divisions. Only 6.3 percent state that they are free to decide to buy services externally, 73.4 percent indicate that they could do so with the management's approval. About 20 percent of respondents are not allowed to buy externally.

Halal, Geranmayeh and Pourdehnad (1993) urge managers to redesign their organisations around the notion of a free enterprise market in which operating units freely compete with external suppliers for business within and without the organisation. Because internal suppliers are generally isolated from other sources of supply, the economic structure (regulated monopoly) under which the provider operates can affect the quality of services rendered. The regulated monopoly creates varying forms of dependence on the provider and can subject the user to moral hazards (Mills and Ungson, 2001).

Many internal services such as human resources, information systems, legal support, accounting and financial control systems can be secured externally and are often undertaken in the form of sub-contracting or out-sourcing.

Placing prices on the use of organisation's internal services enables revenue-producing units to compare those services with similar services offered in the external market. Giving revenue-producing units the option of purchasing services from either source imposes efficiencies on the internal service provider. If the same services can be outsourced or are offered externally at a lower price, internal service providers must lower their price to remain competitive. For a more meaningful analysis, responses to freedom to out-source should be obtained and broken down by the type of responsibility centres (cost centre, profit centre, investment centre, and revenue centre).

4.1.29. Reasons for out-sourcing

Reasons cited by respondents for out-sourcing are tabulated in Table 4.38.

Where divisions are allowed to consider out-sourcing internally provided services, according to 47.8 percent of respondents, “better price” is the major reason for out-sourcing. Other major reasons for outsourcing include “better quality” (20%) and “desire to maintain a second source” (17.4 %).

Table 4.38
Reasons for out-sourcing

	Frequency	Percent
Better quality	14	20.3
Better availability	8	11.6
Better price	33	47.8
Internal capacity constraints	2	2.9
Desire to maintain a second source	12	17.4

Seventy percent (70%) of respondents indicate that they make extensive efforts to secure the lowest sources of supply while the same is not a major concern for 10.1 percent. The remaining 20 percent state they neither agree nor disagree with the above statement (Table 4.39).

Table 4.39
Importance of lowest sources of supply

	Frequency	Percent
Strongly disagree	3	3.8
Disagree	5	6.3
Neither agree nor disagree	16	20.0
Agree	40	50.0
Strongly agree	16	20.0
Total	80	100.0

It is clear that when service companies outsource, they are mainly motivated by better prices available in the external market. The internal service approach requires individual sub-units to justify their existence which may probably be achieved by being as competitive as external suppliers (Zemke and Zemke, 1994). In other words, they have to make themselves indispensable with their level of conditions and the value created for internal customers.

4.1.30. Extent of intro-corporate trade

The extent to which a firm makes internal transfers arises out of a strategic choice between buying components from external sources and making them itself (Spicer, 1988). Seventy-five percent (75%) of respondents state that the amount of internal trade as a proportion of total company sales is between 1-19 percent (Table 4.40). The percentage of respondents that indicate their internal trade is “between 20-39%” and “between 40-59% is 13.8% and 11.3%, respectively.

Table 4.40

Extent of intra-corporate trade

	Frequency	Percent
0-19%	60	75.0
20-39%	11	13.8
40-59%	9	11.2
Total	80	100.0

Table 4.41 presents a comparative summary of results of some selected studies as they relate to the extent of intra-firm trade. However, different classification schemes employed in each study as well as all studies except the current one reflect a manufacturing company perspective and make comparability of results across studies very difficult. Vancil (1979) estimates the extent of internal transfers at 10 percent. Inspection of figures reveals that intra-firm trade constitutes a relatively smaller percentage of annual revenue.

Table 4.41

Proportion of intra-corporate trade (expressed in terms of percentage of total company sales)

	Present research	Elliott (1998)	Drury <i>et al.</i> (1993)	Mehafdi (1990)	Scapens <i>et al.</i> (1982)	Tang (1981)	Chenhall (1979)	Vancil (1979)	Tomkins (1973)	Rook (1971)
0-less than 5%			36%							
0-less than 10%		27%		55%		50%				50%
5-19%			36%							
10-25%		8%		21%						34%
0-19%	75.0		72%				52.6 %		% 91.1	
0-less than 15%								77.1 %		
15% and above								22.9 %		
20-39%	13.8									
20-49%			16%							
25% +		13%		24%	15% (UK) 18% (USA)	25%				Negligible
40-59%	11.2									
50% +			13%							

Findings of this research are consistent with many prior studies which report small volumes, typically less than 20%. Although no researcher so far has investigated the reasons for this low level of internal trade, Williamson (1985) explains a relatively higher proportion of internal trade by the level of vertical integration. A Project manager of a major multinational firm (Company J) comments “I am not going to answer your question, you are asking my profit margin”. This difference is likely either the profit margin or direct allocations of overhead or a combination of both.

Williamson (1993) observes high levels of internal trade in companies with high levels of vertical integration (aluminum firm), technological sensitivity (electrical and electronic firms), and specialty products with no intermediate markets (tobacco company and pharmaceutical firms).

4.1.31. Value

Following Zeithaml (1988), the net value is defined as “the sum of perceived benefits (gross value) minus the sum of all the perceived costs. In a service organisation, the gross value typically resides in the nature of the service products offered, the experience and expertise of the service personnel, the place and manner of service delivery, the reputation of the firm and the package of benefits available to customers. Customers feel satisfied where they receive net value that has more benefits than all the cumulative costs incurred in acquiring a service. Corporate management’s definition of value is equally divided (31.2 percent of respondents for each statement) between “value is everything I want in a service” and “value is the quality I get for the price I pay”. The proportion of respondents that relate value to low price remained at just 10.3 percent (Table 4.42).

Table 4.42

Value definition (Corporate perspective)

	Frequency	Percent
Value is low price	8	10.3
Value is everything I want in a service	25	32.1
Value is the quality I get for the price I pay	25	32.1
Value is all I get for all that I give	19	24.4
Other	1	1.3

Company A's value definition is "value for me is delivery on time to a defined cost and delivering to customer's requirements".

A manager at Company B defines perceived value as:

"Customer perceived value. Well, that is the million dollar question, isn't it? My simple definition is that customer's perception of value is related to the perception of the deliverables versus the perception of the price paid for it. It depends on whether they feel that the deliverable, once delivered, is below what they feel they have paid for or above."

Drucker (1985) points out that it is a big mistake to understand business or corporate value only from the viewpoint of a pursuit for profit, and emphasises that the mission and objective of businesses operated by corporations is to create customers. In other words, no matter how competitive a company's product or service might be, if a customer does not ask for it and pay money for it, that product or service cannot possibly exist. The customer value creation, in the long term, is likely to translate into shareholder value (Heskett *et al.*, 1994)

4.1.32. Importance of the internal customer perceived value

For the majority of respondents (60.8%), if and how internal customers value is not considered as an issue. Only 39.2 percent of respondents state that it is important for them to find out if and how internal customers value the services they acquire internally.

A revenue centre manager (Company B) remarks:

“Look, there has been a big culture shift in the services stream in the last three to four years and they (internal suppliers) do realise that we are their customer. However one problem that we have is that they are a little removed from the end customer, and so they don't see the direct impact that their cost base has there. The only time-the time that they will see- is if we then go back and say 'you are too costly' or if the customer goes back and says you are too costly. Then you need to do something.”

Especially where internal prices are mandated and buying internally-available services from external sources is either restricted or disallowed, what factors should motivate an internal division to give serious consideration to whether internal customers end up with a net value after transactions? Given that overhead allocations and transfer price decisions are by and large made at the corporate management level, who is the real customer of an internal department is an issue to ponder.

As stated by Morris and Calantone (1990), costs are primarily an indicator of company efficiency and effectiveness, and therefore are unrelated to the amount customers are willing to pay. The fact that full cost is the most frequently used basis for transfer pricing is an indication that perceived value, in other words, the amount that internal customer might be willing to pay, is essentially ignored.

The project manager of Company J states that:

“In most cases I do not feel that I am delivering value to the customer as internal organisations fail to deliver value to me. In most situations I feel I get ripped off more than I feel that I am being delivered value. The main reason is that usually the price is above the market rates which then results in the customer expecting deliverables which are better than the standard which can be expected from paying market rates. However, the majority of internal service providers I work with completely fail to deliver to better quality standards whilst charging significantly higher fees.”

L. Gertner, president of American Express, suggests the following reason for lack of management commitment to quality (Business Week, 1981):

“Because of the structure of most companies, the guy who puts in the service operation and bears the expense doesn’t get the benefit. It will show up in marketing even in new product development. But the benefit never shows up in his profit and loss statement (p.62). “

Given that the quality is a component of value, results of the current research support Gertner in the sense that providing value to internal customers is not significant. Nagle and Cressman (2002) cite a telecommunications company that quantified the value of its superior reliability by estimating the revenue loss to customers of interruptions in their data lines. In response to his description of value, a divisional manager (Company C) indicated during the interview that “the value that is created for me is value”. It is particularly difficult for employees to identify their customers when those customers are internal to the company.

These employees often do not know what impact their work has on other departments. Identifying internal customers requires mapping and communicating characteristics of work flow, organising periodic cross-departmental meetings between ‘customers’ and ‘servers’ and recognising good internal service performance (Heskett *et al.*, 1994).

Davis (2001) highlights the importance of bringing various departments into closer touch with each other, and in doing so, they must create clear consequences for doing a good or poor job. If departments do not stand to gain anything from cooperating with others, poor performance should come as no surprise. It seems clear that eliciting customer’s definition and perception of value makes sense if suppliers understand customer’s requirements and develop service products accordingly.

4.1.33. Internal value creation and setting transfer price

About 35 percent of divisional staff consider value creation for internal customer important in setting transfer prices. For 41.8 percent of respondents, the issue of setting transfer prices so as to create value for internal customers is either of little importance or unimportant (Table 4.43).

Table 4.43

Importance of value creation for internal customer in setting transfer price

	Frequency	Percent
Very important	9	11.4
Important	17	21.5
Undecided	20	25.3
Of little importance	29	36.7
Not important	4	5.1

Internal providers can prosper only when they approach their customers with the desire to provide the same level of increased net value as their external competitors (Butz and Goodstein, 1996). A manager at Company J states:

“For me the benefits that I receive from most internal service transactions are very little. The majority of the time, the benefits that I receive from the internal service is too little and too late. For example the deliverables are over budget, over time and fail to satisfy quality expectations.”

Thirty-five percent of the firms surveyed report that the internal supplier cares about reducing their costs without sacrificing what they from the services. 25 percent are undecided. Smith and Nagle (2002) believe that ‘willingness to pay’ is important to tactical pricing but it is woefully inadequate as a basis of pricing strategy. Good pricing strategy is about estimating market demand and reacting optimally to it. It is about managing demand.

Pricing strategists manage demand by making subtle changes to capture different levels of price from different types of buyers, by creating incentives for some customers to change when or how they buy, and by communicating information and framing price offers that cause customers to view the offer more favourably. To support those efforts, pricing strategists need more fundamental customer information than simple willingness to pay.

They must understand the level and antecedents of value especially in the business-to-business (B2B) markets where benefits can be quantified and value can be readily measured. (Smith and Nagle, 2002). If value is of concern, according to Blois (2003), both the buyer and the supplier should seek to enhance the value of their operations.

4.1.34. Customer value and competitive advantage

Although several studies were conducted to investigate the requirements of external customers, very little effort is made to understand the service requirements of internal customers. In terms of quality, some authors (Albrecht, 1990; Berry, 1995) argue that internal service quality is one of the most important but at the same time least understood concepts in modern business. This research shows that more than half of the respondents (55.7%) are undecided on whether or not there is a relationship between value created for internal customers and competitive advantage at product level. Those who believe there is an association account for 24 percent of respondents (Table 4.44).

Table 4.44

Relationship between value created for internal customers and competitive advantage at product level

	Frequency	Percent
Most likely	5	6.3
Likely	14	17.7
Neither likely nor unlikely	44	55.7
Not likely	13	16.5
Not at all likely	3	3.8

4.1.35. Association between satisfaction of internal customers and external customers

Satisfaction is generally associated with one particular transaction at a particular time and is defined as an emotional reaction to a product or service experience (Spreng, Mackenzie and Olhavsky, 1996). If organisations wish to build stronger relationships with external customers, then this is only feasible if preceded by integrating service provision processes across the entire organisation (Gronroos, 1978). Similarly, in the internal marketing context, Sasser (1976) argues that the successful service company must first sell the job to employees before it can sell its services to customers. Only 30 percent of respondents agree or strongly agree that there is an association between satisfaction of internal customers and satisfaction of external customers. About 40 percent either disagree or strongly disagree with this statement (Table 4.45).

Table 4.45
Relationship between satisfaction of internal customers and external customers

	Frequency	Percent
Strongly disagree	5	6.3
Disagree	27	33.8
Neither agree nor disagree	24	30.0
Agree	20	25.0
Strongly agree	4	5.0

The ability to meet customer requirements is vital not only between two separate organisations but also within the same organisation (Oakland, 1993). Chaston (1995) questions the validity of most of the published outcomes as they were qualitative and were largely anecdotal drawn from a few case examples.

Therefore, he suggests that the internal customer management issue should not become a priority issue (within the UK Clearing Banks) until further research produces carefully validated cost and benefit evaluations. Gronroos (1990) describes service process as a network of systems built between a number of sub-processes arguing that every service operation comprises inter-connected internal service functions and that if poor service exists then the final service to the external customer will be inadequate. Internal service quality is one of the most important and least understood concepts in modern business (Marshall, Baker and Finn (1998). Successful internal encounters are considered to have a direct link to external customer satisfaction (George and Gronroos, 1989), and by satisfying the needs of its internal customers, an organisation can upgrade its capability for satisfying the needs of its external customers (Greene, Walls and Schrest, 1994).

Farner, Luthans and Sommer (2001) report that the basic principle of internal customer service posits that every department in an organisation exists to serve someone whether that be the external customer or another department. The organisation consists of an interdependent chain of individuals and functional units each taking inputs from one another and turning them into external customer service. The basic assumption is that if everybody strives to provide their internal customer with better service then the end customer will receive higher quality service. The basic needs of internal departments must be satisfied in a similar fashion to satisfying external customer needs before an organisation is able to provide quality service to the external customers (Wisner and Stanley, 1999). Better service to internal customers results in better service to external customers (Heskett *et al.*, 1994; Hart, 1995; Lings and Brooks, 1993; George, 1990).

If poor internal service exists the final service to the customer will be damaged (George and Gronroos, 1989). It should be, however, noted that arguments both in favour of and against internal customer service are not based on empirical analysis.

Although admitting the complexity of the relationship, Piercy (1995) suggests that our external customer satisfaction is both dependent on and a contributor to our internal customer satisfaction. Organisational units should provide a high level of service quality to their internal customers for some of the same reasons they provide to external customers such as more effective performance, lower costs or lower waste. According to the service profit chain model devised by Heskett et al. (1994) improvements in internal service quality should be expected to result in improved external service quality. A third difference between external and internal customers is that internal customers are paid, professional consumers of services they use. As such they are more familiar with and knowledgeable about the services they are provided than are most external customers (Lusch, Brown and Brunswick., 1992).

4.1.36. Value chain analysis (VCA)

Value Chain Analysis conceived by Porter (1980) examines activities in the value chain from the customer's point of view and it helps unearth how customer value is generated. As shown in Table 4.46, five percent of respondents stated that they have a consistent and formalised process as it applies to value chain analysis. Another 16.5 percent indicated that they employed VCA occasionally and the majority (78.5%) did not use VCA.

Table 4.46

Use of value chain analysis

	Frequency	Percent
There is a consistent and formalized process for VCA	4	5.1
VCA is employed occasionally	13	16.5
VCA is not employed	62	78.5

A survey conducted by Chenhall and Langfield-Smith (1998) among Australian manufacturing firms reveal that only 49 percent of respondents employ value chain analysis which is classified as 'low adoption' rate. With regard to future emphasis (next 3 years) respondents rated value chain analysis as a management accounting tool with the lowest relative future emphasis. Guilding, Cravens and Tayles (2000) survey a total of 1292 large companies in USA, U.K. and New Zealand to investigate the incidence and perceived merit of 12 strategic management accounting practices including value chain costing. Value chain costing was rated above the mid point with respect to perceived merit.

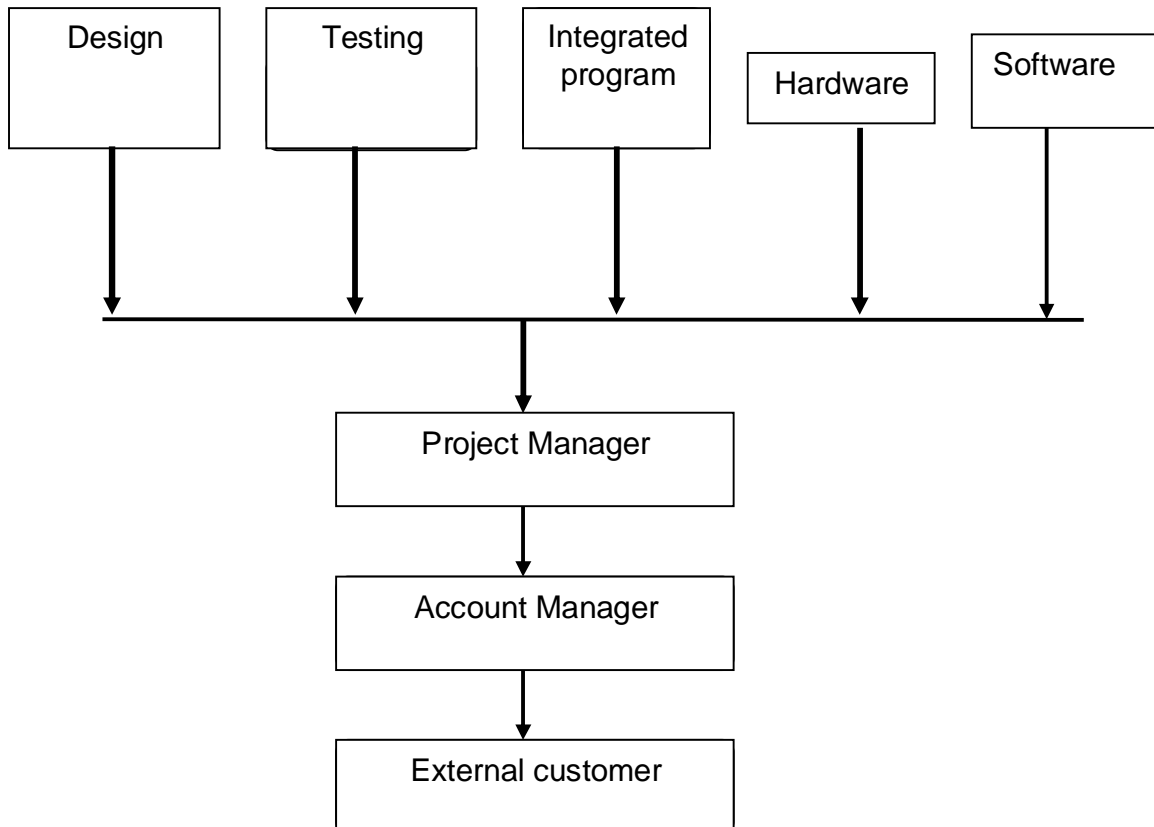
Dekker (2003) questions the insight gained from surveys that examine the adoption rate of value chain practices because components of these practices are unknown. Interestingly, consistent with Dekker (2003), of all interviews conducted, only one executive of one of the top four banks in Australia was thoroughly familiar with value chain analysis and costing. Other divisional managers and even the chief financial officer of a major multinational appeared to have little or no knowledge of value chain analysis.

One of the chief reasons for value chain analysis is to discover the firm's relative competitive position, which involves comparing the value chain of a firm with those of its competitors (Hergert and Morris, 1989). Value Chain, as conceptualised by Porter (1980, 1985) emphasises inter-dependency of parts of the chain and linkages between them. The value chain was originally designed for manufacturing companies where interdependencies between various primary activities are obvious. Support activities complement primary activities and activities are sequential. During the interviews, the value chains of some of the interviewed organisations were configured. The value chains ultimately obtained differ significantly from Porter's (1980) value chain. First, in the services examined activities are not sequential and many of them are being performed independently. Therefore, in most instances, there are hardly any inter-linkages.

Some examples of service value chains follow.

Figure 4.1

Value chain of a telecommunications service (Company B)

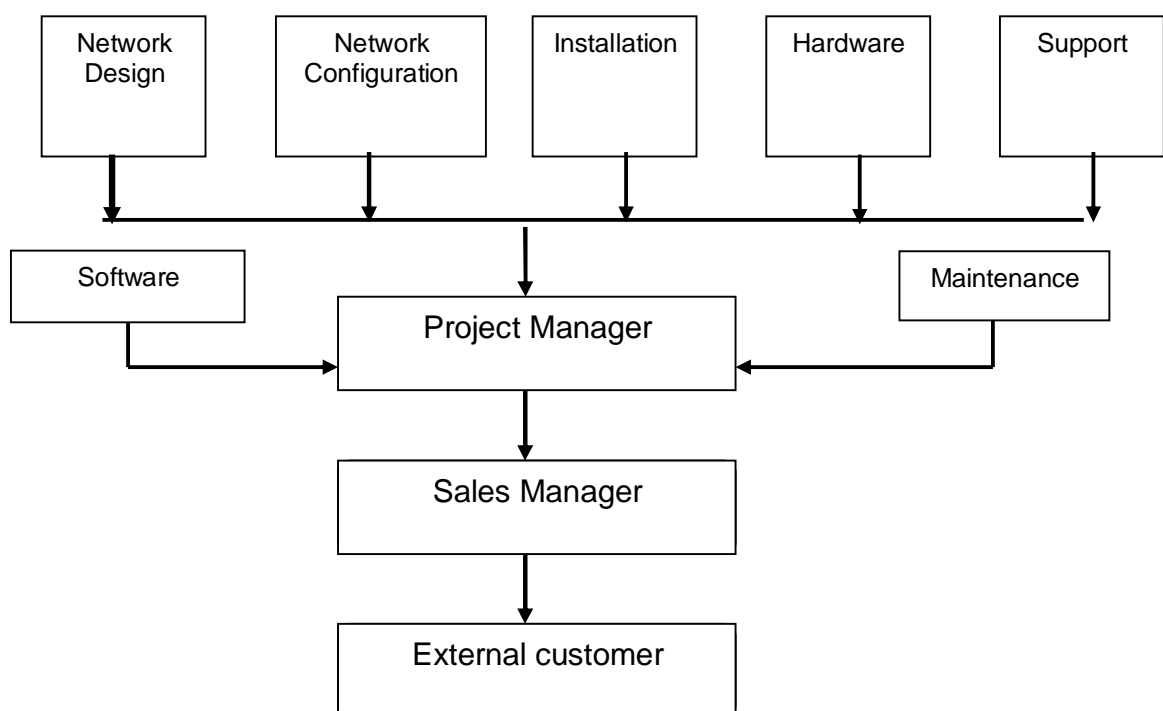


The above chain of activities for a telecommunications service product illustrates that many activities are independent of each other (Figure 4.1). The observed businesses are not organised along the value chain thought. In addition, the dependency of activities commonly found in most products does not apply to chosen services. Finally, generation of value is not envisaged either.

Telecommunications company J's value network is shown in Figure 4.2.

Figure 4.2

Value chain of a telecommunications company (Company J):



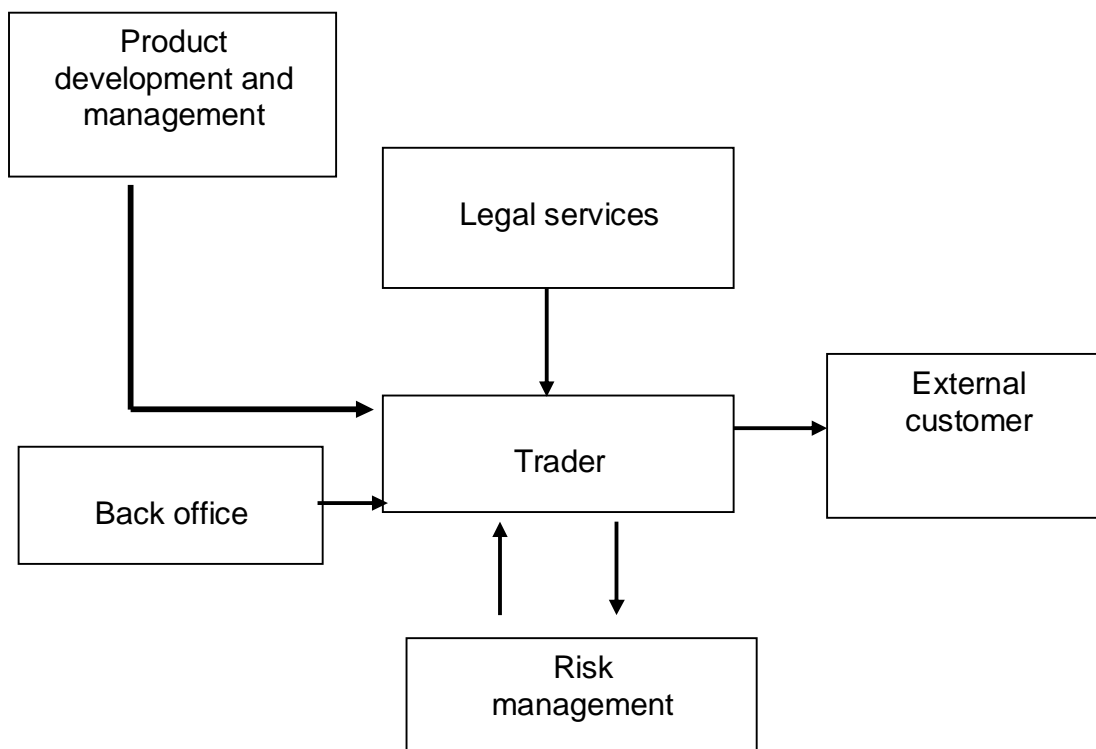
Internal sourcing evaluations in telecommunication companies examined are informal. As the industry is labour intensive, direct labour constitutes the major cost item for which the rate is typically set by the headquarters with local divisions determining the number of hours.

Cost centre's major objective is resource utilisation. The similarity between the two value chains provided above for two different telecommunications companies lends support to Morrow (1992) who argues that in general, organisations operating in the same industry tend to share similar value chain characteristics.

The value network for funds management activity of one of the top four Australian banks (Company C) follows.

Figure 4.3

Value chain of funds management of a major Australian bank (Company C)



In the cases examined, the so-called value chain is more vertical than horizontal as originally conceived by Porter (1980). Denton (1991) proposes that customer specifications pass through internal customers to internal suppliers and eventually on to the external supplier. Denton's (1991) horizontal management is consistent with Porter's value chain model.

Specifications originate from the external customer and flow into the organisation via the supply functions, i.e., customers' requirements are passed to the first supply function in the value chain and are then passed back along the value chain. Mills and Ungson (2001) propose that almost all tasks within the firm's value chain require services as inputs from other employees for work to be completed. As information flows from one unit to another, internal transactions are executed extensively throughout the organisation. As a result, the arrangement of tasks is not only sequential but also heavily reciprocal and interdependent.

Within internal structures, service units or employees are assumed to be seeking ways to enhance the value of services (Mills and Ungson, 2001). As the divisional operating units become more efficient and focused on customer satisfaction, the end customer would be served better. Because the end customer drives the economics of the firm's internal supply chain, the firm's strategic position is strengthened. Cox (1997), Chief Executive of Unisys Information Services, Europe, takes the argument about understanding customer further to state that they not only have to understand their customers, they have to understand their customers' customers to know where their business sector is going, to anticipate what systems their customers will need in order to remain at the very forefront of competition, often to work with them both on future planning and on rapid implementation.

4.1.37. Sources of competitive advantage

Organisations are beginning to recognise the competitive advantages of internal marketing that is identifying and meeting internal customer demands and are reshaping their employee management philosophies (George, 1990; Joseph, 1996). To assess a firm's competitive advantage knowledge pertinent to firm's own value chain, value chains of suppliers and value chains of forward channel allies should be available. Responses to the sources of competitive advantage as identified by corporate management are summarised in Table 4.47 and 4.48.

Table 4.47
Sources of competitive advantage

Sources	Mean score	Ranking
IT systems	3.5270	5
Brand equity	3.8108	3
Efficiency improving equipment	3.3714	8
Office automation	3.2319	11
Performance tracking systems	3.3611	9
Organisational knowledge and routines	4.0822	1
Other	3.7879	4
Employee capability	3.8718	2
Employee productivity	3.5270	5
Employee retention	3.3056	10
Motivated employees	3.3836	7
Entrepreneurial skills of employees	3.1486	13
Satisfactory employee compensation	3.1884	12
Focus on employee training and development	3.4595	6
Project management	3.0405	14
Other	3.0405	14

Many managers realise the growing role of internal services even though they may not completely understand how the rules for achieving value are shifting. The effectiveness of internal transactions between units will very much influence the goal of providing value to the customer. The current research shows that “organisational knowledge and routines” and “employee capability” are rated as the first and second most important sources of competitive advantage.

This finding is consistent with Kaplan and Norton (2001), Lovelock (1996) and Berry (1995) who assert that within the service industries, competitive advantage is less likely to come from tangible factors, and is more likely to be derived from intangibles that contribute to unique capabilities.

Zeithaml, Parasuraman and Berry (1990) observe that leading US service companies are obsessed with service excellence. Buzzell and Gale (1987) propose that achieving superior quality results in three competitive advantages: premium price, resources for research and development, and better customer value.

In contrast to Matthysens and Vandembemt (1998) who highlight the importance of project management in creating value, the current research results indicate that project management is the least important unique skill. Bharadwaj, Varadarajan and Fahy (1993) caution that superior skills and resources do not, however, automatically give a business a competitive advantage. They only provide the business with an opportunity to leverage its skills and resources to achieve competitive cost and/or differentiation advantage.

Table 4.48**Sources of competitive advantage – mean scores**

	No effect (%)	A little Effect (%)	Medium Effect (%)	High Effect (%)	Very high effect (%)
IT systems	5.4	8.1	28.4	44.6	13.5
Brand equity	0	8.1	25.7	43.2	23.0
Efficiency improving equipment	4.3	12.9	27.1	52.9	2.9
Office automation	8.7	14.5	24.6	49.3	2.9
Performance tracking systems	2.8	15.3	31.9	43.1	6.9
Organisational knowledge and routines	4.1	16.4	52.1	26.0	1.4
Other	4.9	17.1	48.8	9.8	19.5
Employee capability	0	6.4	21.8	50.0	21.8
Employee productivity	1.4	13.5	28.4	44.6	12.2
Employee retention	1.4	23.6	27.8	37.5	9.7
Motivated employees	0	15.1	35.6	45.2	4.1
Entrepreneurial skills of employees	0	24.3	37.8	36.5	1.4
Satisfactory employee compensation	0	18.8	47.8	29.0	4.3
Focus on employee training and development	0	12.2	37.8	41.9	8.1
Project management	1.4	9.5	24.3	24.3	29.7
Other	0	16.7	25.0	33.3	16.7

4.1.38. Sustainability of competitive advantage

A firm is said to have a sustained competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy (Barney, 1991).

On the other hand, it is argued that competitive advantage cannot be sustained over the longer term, as such advantages can be easily copied (D'aveni, 1994). Therefore, Brown and Eisenhardt (1998) note that there can be only temporary or a series of temporary advantages. In support of Brown and Eisenhardt (1998), Hamel (2000) indicates that 70 percent of companies under-performed the stock market in 1999 and that in today's highly dynamic business environment only a few companies can hope to achieve competitive advantage, even temporary competitive advantage.

Table 4.49**Sustainability of sources of competitive advantage**

	Not possessed by major rivals	Not easily capable of being imitated by major rivals	Cannot be acquired in the market place	It is not easy to find a substitute
Unique assets				
Organisational knowledge	19%	44.8%	15.5%	20.7%
Brand equity	30.2%	37.7%	22.6%	9.4%
IT systems	16.3%	49.0%	12.2%	22.4%
Efficiency improving equipment	10.3%	53.8%	12.8%	23.1%
Performance tracking systems	8.3%	44.4%	16.7%	30.6%
Office automation	11.8%	52.9%	20.6%	14.7%
Unique skills				
Employee capability	8.9%	44.4%	11.1%	35.6%
Employee productivity	18.2%	49.1%	12.7%	20.0%
Employee training	13.8%	51.7%	13.8%	20.7%
Motivated employees	15.6%	31.3%	25.0%	28.1%
Employee retention	21.4%	25.0%	25.0%	28.6%
Employee compensation	5.0%	40.0%	25.0%	30.0%
Entrepreneurial skills	20.8%	25.0%	20.8%	33.3%
Project management	6.5%	51.6%	16.1%	25.8%

The breakdown of responses on sustainability of sources of competitive advantage is shown in Table 4.49. Only 24.1 percent of firms believe there is a relationship between value created for internal customers and competitive advantage at the product level.

Furthermore, the proportion of firms that believe internal price should be set with value creation in mind is 32.9 percent. Results indicate that internal value creation for the internal customer is not a priority for the service firms surveyed. The conclusion achieved is also supported by the fact that only 32.6 percent of respondents disagreed with the statement that their primary objective is to serve external customers, therefore satisfaction of internal customers is insignificant. It is important to note however, that above data reflect firm's perspective. As Day and Wensley (1988) suggest customers' and competitors' perspectives need to be used.

There is consensus that the creation of competitive advantage in services industries will display unique characteristics. For instance, most of the essential requirements for sustainability of competitive advantage (such as rarity, imperfectly imitable and lack of strategically equivalent substitutes) are expected to be more difficult to satisfy in service businesses (Matthysens and Vandenbempt, 1998). Barney (1991) lists four essential requirements for a resource or skill to be a source sustainable competitive advantage: (1) It must be valuable; (2) It must be rare; (3) it must be imperfectly imitable; and (4) there must not be any strategically equivalent substitutes for this resource or skill.

4.1.39. Cost Drivers

Cost driver refers to an activity or event that causes the incurrence of a cost. Among attempts made to draw up a list of cost drivers, Porter (1980) develops the following list which was used in this research (see Table 4.50). Shank and Govindarajan (1992) break down the cost drivers into two distinctive categories: structural cost drivers and executional cost drivers.

Each major heading was then broken down to its constituent elements, i.e., scale (of investment in capacity), scope (degree of vertical integration), experience (accumulated experience), technology (process technology employed) and complexity (breadth of product line) for structural cost drivers; and work force involvement, total quality management, capacity utilisation, plant layout efficiency, product configuration and linkages with suppliers and customers. It should be noted, however, that these lists of cost drivers have been developed primarily for manufacturing organisations. There is a need for research to identify cost drivers applicable to service industries. The findings presented below should be taken as preliminary signs of what cost drivers are used in service businesses.

Table 4.50
Cost drivers

	Mean	Standard deviation
1. Capacity utilisation	4.2597	.89447
2. Learning curve	3.9481	.84130
3. Shared resources	3.6579	.85717
4. Product line breadth	3.5921	1.07499
5. Economies of scale	3.4605	1.10080
6. Interrelationships among divisions	3.3247	.86514
7. Technology	3.0667	1.23391
8. Linkages	3.0649	.92249
9. Employee involvement	2.9610	.86514
10. Total quality management	2.9476	1.01843
11. Product configuration	2.9333	1.11904
12. Timing of market entry	2.1711	1.06318
13. Institutional costs	2.0667	1.04407

As identification and analysis of cost drivers can best be performed using ABC costing, given only a very small proportion of firms studied used ABC, the above responses should represent just informed guesses. The findings point to the fact that capacity utilisation, learning curve and shared resources are the major cost drivers which is consistent with the prevalence of cost-based pricing systems.

4.1.40. Controlling operating costs

Most banks focus on reducing labour costs and competing on price (Keltner and Finegold, 1996).

Table 4.51

Control of operating costs

	Frequency	Percent
Strongly disagree	0	0
Disagree	0	0
Neither agree nor disagree	4	5.0
Agree	26	32.5
Strongly agree	50	62.5

An overwhelming majority of respondents (95%) place considerable emphasis on the control of operating costs (Table 4.51). The remainder of 5 percent are undecided. Strong emphasis on cost control is evident. However, Ward (1993) regards value chain analysis as a sensible starting place for cost control. Given that value chain analysis is hardly popular among service businesses, cited emphasis on cost control may be questioned. This area may be further researched to ascertain the tool (s) service firms employ to control their costs.

4.1.41. Monitoring operations to keep costs under control

Table 4.52 shows that almost 88 percent of respondents state they monitor operations to keep costs under control. Only 3.8 percent indicated that they do not while 8.8% remained undecided.

Table 4.52
Monitoring operations to control costs

	Frequency	Percent
Strongly disagree	0	0
Disagree	3	3.8
Neither agree nor disagree	7	8.8
Agree	23	28.8
Strongly agree	47	58.8

4.1.42. Efficiency improvement

A large proportion of respondents (61.3 %) state that they devote considerable time and energy to improving efficiency. Only 11.3 percent stated they did not. More than a quarter of respondents, however, remained undecided about the question (4.53).

Table 4.53
Efficiency improvement

	Frequency	Percent
Strongly disagree	3	3.8
Disagree	6	7.5
Neither agree nor disagree	22	27.5
Agree	45	56.3
Strongly agree	4	5.0
	80	100

4.1.43. Better finance

In the context of international transfer pricing, Daniels, Ogram and Radebaugh (1976) argue that cheap finance may improve competitive advantage. As shown in Table 4.54, most of the respondents (44.3%) believe they could not obtain finance at relatively lower cost while 29.2 percent indicate they could obtain it. More than a quarter (26.6%) of respondents were undecided.

Table 4.54

Better finance

	Frequency	Percent
Strongly disagree	1	1.3
Disagree	34	43.0
Neither agree nor disagree	21	26.6
Agree	19	24.1
Strongly agree	4	5.1

4.1.44. Emphasis in marketing communications

Distinctiveness of the service products offered and image are emphasized by the majority of respondents (70.1%) with undecideds (17.5%) and those that do not place a special emphasis on distinctiveness and image (Table 4.55).

Table 4.55

Marketing communications

	Frequency	Percent
Strongly disagree	1	1.3
Disagree	9	11.3
Neither agree nor disagree	14	17.5
Agree	37	46.3
Strongly agree	19	23.85

The purpose of value communication is to raise uninformed buyers' willingness to pay to a level comparable to that of well-informed buyers, and value-based pricing will have limited success unless the company 's marketing program effectively communicates the value (Nagle and Cressman, 2002). Davis (2001) also points to the need for many departments to educate other departments about the functions they perform and promote their services to existing and potential users. He adds that service and support functions now realise that they cannot wait for other departments to come to them.

They need to market their services to internal customers. He also suggests that departments need to market their services to internal customers and seek feedback on performance, pricing, quality of service, delivery, convenience and speed. Marketing communications performed for external customers also apply to internal customers in terms of influencing their perception about the value of the goods and services they procure internally. But it appears that the necessary marketing communications effort is not occurring.

4.1.45. Development of new service products

Berry (1981) stresses that it is essential that the senior management consider staff as internal customers and their jobs as internal products. Further, if the organisation wishes to meet the expectations of external customer, this can be achieved by designing internal products which satisfy the needs of internal customers. Sixty percent of respondents regularly develop new service products or significantly change the line of service products they offer with 21 percent undecided and 18.8 percent disagreeing with the practice of new service product development (4.56).

Table 4.56**Development of service products**

	Frequency	Percent
Strongly disagree	4	5.0
Disagree	11	13.8
Neither agree nor disagree	17	21.3
Agree	33	41.3
Strongly agree	15	18.8

Most service products have very short life cycles because their features can be easily copied by competitors, service product development is an essential element of strategy.

A large percentage of respondents indicate that developing new service products for internal customers is not their top priority. Only 12.5 percent of respondents answered this question in the affirmative. The remaining 20 percent neither agreed nor disagreed (4.57) .

Table 4.57**New service products for internal customers**

	Frequency	Percent
Strongly disagree	22	27.5
Disagree	32	40.0
Neither agree nor disagree	16	20.0
Agree	10	12.5
Strongly agree	0	0

4.1.46. Change in the product line

Almost 26 percent of respondents state that their product line seldom changed while 31.6 percent disagree or strongly disagree with the statement. The largest proportion of respondents neither agree nor disagree with the statement (Table 4.58).

Table 4.58

Change in product line

	Frequency	Percent
Strongly disagree	5	6.3
Disagree	20	25.3
Neither agree nor disagree	33	41.8
Agree	18	22.8
Strongly agree	3	3.8

4.1.47. Unique services

Sixty-five percent of respondents state that they try to offer unique service products so that they can charge premium prices to external customers. Twenty-one percent indicate that they neither agree nor disagree with the statement and 23.8 percent stated they do not (Table 4.59).

Table 4.59**Unique services**

	Frequency	Percent
Strongly disagree	0	0
Disagree	7	8.8
Neither agree nor disagree	21	26.3
Agree	36	45
Strongly agree	12	20

4.1.48. Offering superior service products than competition

As shown in Table 4.60, more than 63 percent of respondents aim to offer products superior to those of their competitors. About 32 percent of respondents, however, neither agrees nor disagrees with the aim of offering better products. Only 5 percent disagrees or strongly disagrees with the statement.

Table 4.60**Superior products**

	Frequency	Percent
Strongly disagree	1	1.3
Disagree	3	3.8
Neither agree nor disagree	25	31.6
Agree	39	49.4
Strongly agree	11	13.9

4.1.49. Service Level Agreements (SLA)

Because services are non-returnable and, unlike goods, associated difficulties to evaluate the quality and performance of services prior to purchase inevitably result in discomfort on the part of the buyer. Hence, Service Level Agreements (SLAs) serve to alleviate the buyer's risk and concerns about the service transaction. As a result, inherent risk and anxiety in service acquisitions may thus be reduced. A service guarantee is defined by Hart and Bogan (1992) as a statement explaining the service customers can expect (the promise) and what the company will do if it fails to deliver (the payout). SLAs create value for customers by reducing uncertainty about the services that will be delivered, their standards and costs. The purpose of SLAs is to define the performance required of the service and to put in place measurement mechanisms whereby actual performance against targets can be monitored (Parish, 1997). Originally, service guarantees were designed for external customers to attract and retain them (Evans and Ashworth, 1996), gain market share through differentiation (Hill and Jones, 2001) and learn about customer needs (Hart, 1993). Application of service guarantees to internal markets is relatively recent. The use of guarantees for internal customers includes fine-tuning internal processes to respond to service failure (Callan and Moore, 1998; Rushmore, 1998). Implementing service guarantees lead to increased revenues (Hart, 1993) and improved operational efficiencies (Kashyap, 2001).

Warranties and guarantees are used to alleviate possible customer apprehensions of possible product service failures. Warranties offer certain assurance by the supplier that specific product/service features will perform as promised. Under guarantee, products may be returned for full refund or exchange. Services, however, due to their intangibility, may not be returned. Service Level Agreements contain targets that are quantifiable and, therefore, objectively measurable. SLAs are helpful to service providers as well as to the customers.

They help customers by showing them which levels of service they may expect and provide them with a basis for their complaints if the expected quality is not delivered. Service providers, on the other hand, can use SLAs to configure their services to the specified needs of a singular customer and are at the same time protected against ever-growing customer demands regarding their efforts. If quality is to be assured, it is necessary that the providers regularly assess their inputs with regard to the service levels specified in the SLA.

Hart (1995) argues that internal guarantees improve organizational performance in three ways.

1. A true spirit of team work and partnership develops between different parts of the organisation;
2. An environment of blameless error takes hold wherein employees are rewarded not punished for identifying problems instead of sweeping them under the rug or blaming someone else; and continuous dialogue and feedback begin with progress, problems and processes; and
3. Under SLAs departments contract with other internal departments to provide a specified level of service.

Table 4.61

Service Level Agreements

	Frequency	Percent
Strongly agree	15	18.8%
Agree	4	5.0%
Neither agree nor disagree	30	37.5%
Disagree	31	38.7%
Strongly disagree	0	0

As Table 4.61 shows, only 23.8% of the respondents indicate that they have service level agreements in place that prescribes mutual rights and obligations of both the internal supplier and internal customer.

Service Level Agreements are contracts between the service provider and the customer and serve as a guarantee for both sides. For the customer, SLA is a security that the ordered services will be delivered in the required quality. For the provider on the other hand, SLAs allow a clearer communication about the provided services and are protection against unjustified service requirements. One of the interviewees (project manager at Company B) states that they call them Service Description Documents (SDD) and stressed that they cannot work without them. SDDs also contain sanctions for service failures.

It is important to realise that the perceived risk associated with the purchase of a service is generally higher than for physical goods. A higher risk leads to a reduced perceived value thus lowering the consumers' willingness to pay and therefore limiting the service provider's possible profit margin. The main reason for the higher perceived risk is that compared to physical goods services are more difficult to examine and compare before the time of purchase.

Table 4.62

Service vs Goods

Service	Good
Intangibility doesn't allow comparisons or trials prior to purchase	Can be tried, felt, operated and alternative offers can be compared
Cannot be returned	Can be returned
Attributes are not easily observable	Attributes can be observed, demonstrated
Output is not observable	Output is observable

In order to reduce the perceived risk and therefore be able to set higher prices service providers may offer guarantees. Moreover, SLAs may be used to give precise descriptions of the offered services to the customers and therefore reducing possible gaps concerning the quality of the service between the provider and the customer.

Because many internal departments operate in a kind of quasi-monopoly situation, internal divisions have hardly any incentive to treat buying divisions as its customers. Moreover, internal service providers which are cost centres may lack a service-oriented philosophy. SLAs containing penalty clauses and comparison with outsourcing possibilities may apply the necessary pressure on the internal divisions to adopt more customer-oriented approach.

4.1.50. Competitive prices

As Table 4.63 shows, sixty-four percent of respondents stated that they try to maintain competitive prices as they offer similar products to the competition. Eleven percent stated they disagreed with the statement while almost 24 percent neither agreed nor disagreed.

Table 4.63**Competitive prices**

	Frequency	Percent
Strongly disagree	0	0
Disagree	10	12.5
Neither agree nor disagree	19	23.8
Agree	42	52.5
Strongly agree	9	11.3

4.2. Factor Analysis

A total of fifty-seven variables were operationalised in this research. Six scales were structured to evaluate both components of value; benefit components (assurance, responsiveness, reliability, empathy, tangibles, flexibility and innovation) and; cost components (price, time, effort and energy and psychic costs) and overall service value. The principal objective was to identify latent variable(s) or factors present in the pattern of correlations among those variables.

Factor Analysis is a multivariate statistical technique dealing with the identification of structure within a set of observed variables. It is used to study the interrelationships among variables in an effort to find a new set of variables which can express what is common among the original variables (Stewart, 1981). Factor is a latent (unobserved) underlying construct or dimension which is a condensed statement of the relationships between a set of variables deduced from the correlations between the measured variables (Kleine, 1994). Gorsuch (1983) describes factor analysis as a number of methods designed to analyse interrelationships within a set of variables or objects resulting in the construction of a few hypothetical variables called 'factors'.

Factors are supposed to contain the essential information in a larger set of observed variables or objects that reduces the overall complexity of the data by taking advantage of inherent interdependencies and so a small number of factors will usually account for approximately the same amount of information as do the same amount of information as do the much larger set of original observations. Sureschandar, Rajendran and Anantharaman (2002) argue that exploratory factor analysis (EFA) is particularly useful only in the absence of a sufficiently detailed theory about the relationships of the observed variables to the latent constructs. Factor analysis is used for similar surveys with large number of variables (e.g. Quester and Romaniuk, 1997; Stafford, Stafford and Wells, 1998; Wiele, Boselie and Hesselink, 2002; Zeithaml, Berry and Parasuraman, 1996), Marshall, Baker and Finn (1998) and Sweeney, and Soutar, 2001). Exploratory factor analysis (EFA) is essentially a correlation analysis that is capable of capturing interrelationships among variables. EFA is considered to be an appropriate method for the current research because of the large number of variables operationalised and the objective is to ascertain any groupings among variables.

Factor Analysis is the most appropriate tool for reducing the large number of variables to a smaller set of underlying factors (also termed “components”) by summarising the interrelationships among the variables. Thus, obtained latent variables (factors or components) reflect the summary of essential information found in the variables. The terms ‘factor’ and ‘component’ are used interchangeably. The SPSS software uses the term ‘component’ for factor, and for this reason these two terms which are identical in meaning can be used interchangeably.

4.2.1. Software selection

SPSS software (version 13.0) was employed for data analysis. SPSS is sophisticated statistical software that is capable of performing both the descriptive analysis and factor analysis.

4.2.2. Data Handling

Of the many types of data modes (i.e., O, R, S, Q, and T), the R-mode was selected where rows are cases and columns are variables. Another useful feature of the R-mode is that it helps extract latent factors among the variables. A five-item Likert scale was used, therefore, the data used were interval.

4.2.3. Missing data

An assessment of missing data is important as they may give rise to several problems. First, if respondents with missing data are systematically different from those without missing data, ignorance of this difference may lead to biased results. Second, as most analyses assume complete data, missing data may also indicate a loss of information and, finally, missing data may distort findings (Little and Schenker, 1995). A very limited amount of missing data was present mainly for questions which were entitled "Other". In most cases respondents answered the question by ticking the relevant cell and, as a result, left the 'other' question unanswered.

The missing data were an issue for variables 21-30, 42-57, 58-71, 98-108; 110-116, and 121-135. In the data included for analysis, respondents answered at least one of the alternatives offered.

SPSS 13.00 provides three options to handle missing data: mean substitution, pairwise deletion and listwise deletion. Considering the use of interval data for the major areas of missing data, listwise deletion was employed. Little and Rubin (1987) caution about the use of listwise deletion as the method would reduce the data that are incomplete. However, for the purposes of the current research, the listwise deletion was considered as a safe method of handling missing data.

4.2.4. Reversal of selected entries

The variables VAR191, VAR192, VAR193, VAR194 and VAR 195 were negatively worded (1= strongly disagree indicating negative connotation) while for other questions 1 indicates strongly agree). Entries for those variables were reversed to bring them in line with other entries.

4.2.5. Appropriateness of factor analysis

4.2.5.1. Test of normality

Although factor analysis results are not affected significantly by the assumption of normality, it is agreed that the solution is enhanced where variables are normally distributed.

An examination of the skewness (tilt in the distribution) and kurtosis (peakedness of the distribution) statistics (Appendix 7) reveals that both skewness and kurtosis for all variables were within ± 2 indicating normal distribution. Kurtosis statistics for all variables were also greater than 0.7 satisfying the normality criterion.

In consideration of the small ($n < 100$) sample size used in this research, Shapiro-Wilks W- test of normality was also executed. Test result obtained showed that W statistics range between .771-.911 that is close enough to the $W=1$ mark. Hence, the requirement for normality has been satisfied.

4.2.5.2. Sampling Adequacy

4.2.5.2.1. Kaiser-Meyer-Olkin Test

Principal Components Analysis requires that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy to be greater than 0.5 for each individual variable as well as the set of variables. The appropriateness of the matrix for factoring was tested using Kaiser-Meyer-Olkin statistic. Using the calibration criteria specified by Kaiser and Rice (1974), the degree of common variance among the variables as measured by the KMO statistic is 0.766 (Table 4.64) which indicates that it is 'middling" but very close to 'meritorious".

Table 4.64

Kaiser-Meyer-Olkin and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.766
Bartlett's Test of Sphericity	Approx. Chi-Square	4890.802
	Df	1653
	Sig.	.000

Thus, the KMO statistic of .766 indicates a satisfactory sampling level as it is greater than 0.5, thus permitting use of the factor analysis.

4.2.5.2.2. Anti-Image Correlation Matrix

Anti-Image Correlation Matrix embodies the negatives of the partial correlation coefficients. In addition to using the KMO statistic to test the sampling adequacy, the Anti-Image Correlation Matrix was inspected to ascertain if individual variables' measures of sampling adequacy (MSA) statistic were greater than 0.5. Following iteration 1, inspection of the anti-image correlation matrix showed that all variables satisfied this criterion ($MSA > 0.5$) except the following.

VAR167 Employee appearance

VAR168 Tangibles are important

VAR188 TP and reference price

VAR189 Comparison of costs

VAR190 TP major determinant of value

VAR191 Process time consuming

VAR192 SLAs

VAR196 Warranty for internal service

In the second iteration, all variables had $MSA > 0.5$ except the VAR 165 "Insufficient insight". This variable was then removed, and the third iteration with the remaining variables produced a modified Anti-Image Correlation Matrix. The modified anti-image correlation matrix also had one variable with an $MSA < 0.5$ "Modern offices". The fourth iteration following the removal of "Modern offices" demonstrated that the MSA for all variables had exceeded 0.5. Hence, the sampling adequacy of the data was established.

4.2.5.3. Test of sphericity

Principal Components Analysis requires that the Bartlett's Test of Sphericity is less than the level of significance. As shown in Table 4.65, this requirement is also satisfied as $p < 0.001$.

Table 4.65

Bartlett's test of sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.871
Bartlett's Test of Sphericity	Approx. Chi-Square	4054.23
	df	5
		1176
	Sig.	.000

This also confirms that the Correlation Matrix is not an identity matrix.

4.2.5.4. Presence of substantial correlations

Principal Components Analysis requires that there are correlations between the variables greater than 0.30. This requirement is met as the Correlation Matrix contains 2104 inter-item correlations greater than 0.30.

4.2.5.5. Outliers

Outliers are observations with extreme values which can inappropriately affect the data (Schumacher and Lomax, 1996). Particularly, for the factor analysis, presence of outliers has the potential to impact correlations, which can distort factor analysis output. The Mahalabonis distance was used to identify outliers. Mahalabonis value shows how much a particular case's value differs from the average of all cases. A large Mahalabonis statistic indicates an outlier. The data were examined and no significant changes in values were detected.

4.2.5.6. Sample size

The sample size is greater than 50 ($n=79-80$), therefore, Principal Components Analysis could be performed while exercising caution in interpreting the output as the sample size is still less than 100 ($n<100$).

4.2.5.7. Test of linearity

Linearity of variables was checked using the Inter-Item Correlation Matrix which showed that all variables were significantly correlated except three inter-item correlations. Variables that did not significantly correlate with other variables were removed.

4.2.6. Face validity

Face validity is a subjective criterion that describes the extent to which scale items are meaningful and appear to represent the construct being measured. Kaplan and Sacuzzo (1993) define face validity as the appearance that a measurement is valid; face validity is one of the weakest forms of validity, and it is subjective. The constructs employed in this research were derived from the literature and the pilot studies, the face validity criterion was assumed to be satisfied.

To ascertain if scale items adequately cover the topics and if dimensions are relevant and questions are clear and comprehensible, the scales were developed in line with the procedure outlined by Churchill (1979). Although, the face validity criterion is fundamentally subjective, with a view to enhance both face and content validity, the questionnaires were pilot-tested with six academics and requisite modifications have been effected. These modifications included changes in wording, order of questions, nature of questions as well as providing definitions in the footnote of five technical terms reviewers have indicated as uncommon.

4.2.7. Content Validity

Content validity is the degree to which the instrument provides an adequate representation of the conceptual domain that it is designed to cover. Apart from face validity, content validity is the only type of validity which is subjective and logical rather than statistical (Kaplan and Sacuzzo, 1993). If the items representing the various constructs of an instrument are substantiated by a comprehensive review of the relevant literature, content validity can be assured (Bohrnstedt, 1983). The present instrument has been developed based on a detailed analysis of the prescriptive, conceptual, practitioner and empirical literature. Moreover, the content validity of the instrument was also ensured through an extensive review by experts (both academia and practitioners) in the field.

4.2.8. Construct Validity

The construct validity is concerned with the consistency between the measures employed and the theory. Both perceived sacrifice and perceived benefit variables except price, operationalised in this research are based on literature (i.e., Parasuraman *et al.*, 1988; Porter, 1980, 1985; Brady and Cronin, 2001). Churchill (1979) suggests the assessment of convergent and discriminant validity in investigations of construct validity and Peter (1979) recommends that the reliability coefficients should exceed 0.5 to be acceptable for basic research.

In order to test whether scale items assumed to represent relevant constructs converge on the same construct, the cohesiveness among the scale items was assessed using coefficient alpha. Cronbach alpha scores calculated for each scale are presented in Table 4.66. Using Nunnally's (1978) alpha co-efficient threshold of 0.7 (Cronbach's $\alpha > 0.7$), the results revealed that the reliability coefficients were high for all scales except Psychic Costs. Scale for psychic costs with a low alpha score ($\alpha = .282$) was the only item with an unacceptable score, and as a result, this scale was discarded. Cronbach's alpha is the most commonly used formula for assessing the reliability of a measurement scale with multi-point items (Peter, 1979).

All characteristics were measured on five-point Likert scales from 1 (strongly disagree) to 5 (strongly agree). Because constructs used were multi-dimensional, co-efficient alphas were computed for each scale to ascertain if they share equally in the common core. Factor analysis provides the significance of each item as an indicator of a given construct.

Table 4.66**Reliability scores (Cronbach's Alpha) of scales**

CONSTRUCT	Number of items	Cronbach's alpha Based on standardised items	Comment	Inter-item correlations (range)
Assurance	4	0.938	Excellent	0.756 - 0.852
Responsiveness	7	0.946	Excellent	0.677 - 0.809
Reliability	5	0.923	Excellent	0.634 - 0.798
Empathy	5	0.791	Very good	0.072 - 0.681
Tangibles	3	0.883	Very good	0.618 - 0.799
Flexibility and innovation	6	0.948	Excellent	0.654 - 0.870
Alternate solutions and customisation	8	0.942	Excellent	0.541 - 0.766
Price	8	.844	Very good	0.062 – 0.685
Time, Effort and Energy	3	.882	Very good	-0.055 - 0.789
Psychic costs	1	-.282	Very low. Consistency is questionable.	
Overall service value	5	0.852	Very good	0.271 - 0.698

4.2.9. Convergent validity

Convergent validity deals with the extent to which scale items assumed to represent a construct do in fact converge on the same construct. The reliability of a scale as measured by coefficient alpha reflects the degree of cohesiveness among the scale items and is therefore an indirect indicator of convergent validity. Where there is high correlation between a measure and other measures that are believed to measure the same construct, convergent evidence for validity is obtained (Kaplan and Sacuzzo, 1993).

An appropriate method to assess the convergent and discriminant validity of a measure is to examine respectively the pairwise correlations between the measure and other supposedly similar and dissimilar measures (Ruekert and Churchill, 1984). To ensure convergent validity of the scales and test both convergent and discriminant validity concurrently, scales have been correlated with each other. Although there is no clear criterion that can be used as evidence of convergent validity, using the Correlation Matrix, correlations between similar measures and dissimilar measures have been compared. Campbell and Fiske (1959) require that the correlations between measures designed to capture the same construct be greater than correlations involving those measures and other constructs. An examination of the Correlation Matrix shows that convergent correlations are, by and large, greater than discriminant correlations, that is to say, correlations between theoretically similar items were significantly higher than correlations between theoretically dissimilar items. The Correlation Matrix shows that all construct inter-correlations were significantly less than 1.0. In reinforcement of internal consistency of scales, an analysis of Item-Total Statistics revealed that all item-to-total correlations were above 0.5.

4.2.10. Type of Factor Analysis

There are two frequently used methods of factor extraction: (1) Confirmatory Factor Analysis, and (2) Exploratory Factor Analysis. The Confirmatory Factor Analysis has been ruled out because it is designed to test a hypothesis which is drawn from a strong theoretical and/or empirical foundation (Stevens, 1996; Gorsuch, 1983). No such strong theoretical and/or empirical foundation is present in this study.

Exploratory Factor Analysis, on the other hand, is used when the researcher is interested in uncovering the underlying factor structure of measures and to examine their internal reliability. Further, the researcher sets out the research without any hypothesis about the nature of the relationship among variables.

The conditions for Exploratory Factor Analysis are consistent with the present research in which neither the pattern of interrelationships among variables or the number of factors that can represent variables are known. As the present research is essentially exploratory in nature, no assumptions were made about the association among the variables and with factor (s), and the aim is to identify latent variables underlying the common variance of variables, the Exploratory Factor Analysis was adopted.

The three key decisions involved in performing Exploratory Factor Analysis are deciding on the number of factors to be retained, choosing the appropriate extraction method and choosing the right rotation method. Interpretation of the factor analysis output is also considered to be a complex task because it requires the use of a great deal of personal judgment.

4.2.11. Method of factor extraction

Two main methods exist for extracting factors from the data set. These include:

1. Principal Factor Analysis (PFA)
2. Principal Components Analysis (PCA)

In order to extract the maximum variance from the variables, Principal Components Analysis was adopted as it seeks a linear combination of variables. The Principal Components Analysis assumes that the communality ($h^2=1$) equals one, and therefore uniqueness equals zero. This indicates a linear transformation of variables that assumes the factors will explain all of the variance in each variable. Whereas Principal Factor Analysis relaxes the above mentioned assumption pertaining to communality by allowing the unique portion to be non-zero. Consequently, PFA produces factors with significantly higher factor loadings. Although, higher factor loadings facilitate the interpretability of the output, the PFA is also affected by factor indeterminacy which may result in drawing considerably different conclusions from the same data set.

Velicer and Jackson (1990) warn that the use of principal factor analysis method can be a problem in exploratory factor analysis where the factor structures are determined by the data set. Principal Factor Analysis will provide data which show which factors (components) represent which variables as well as variables which need to be dropped. Another advantage of using the PCA is that each principal component factor explains more variance than would the loadings obtained from any other method of factoring (Nunnally, 1978).

4.2.12. Initial solution

The initial solution provided in Table 4.67 contains variables which are standardised to have a mean of 0.000 and a standard deviation of ± 1.000 . Fifty-seven variables were used and fifty-seven components were extracted. Using the Principal Components method, the initial solution was generated. At this point, decision is made to determine the number of factors. Kim and Mueller (1978) stress that the chief concern at this stage of the analysis is whether a smaller number of factors can account for the covariation among the original, larger set of variables.

The decision can be made using either the Kaiser criterion (dropping components with eigenvalues less than 1.0 or using the Scree Plot (dropping components located after the elbow). The decision to retain for further analysis or drop factors was made using the Kaiser's criterion of 'eigenvalue greater than one' (Dunteman, 1989). Examination of the Total Variance Explained Table (Table 4.67) reveals that seven factors that have eigenvalues greater than one were extracted. Factor loadings refer to the correlation co-efficients between the variables and factors, and the variables with higher correlations (loadings) are more significant and more meaningful for the analysis.

Eigenvalue represents the amount of variance each common (factor) explains. The rationale behind the “eigenvalue greater than one” rule is each factor explains more variance than a single variable. The initial solution indicates that the number of factors to be extracted in the final solution should be seven. The seven components selected for extraction collectively account for 78.102 percent of the total variance, that is to say, the final factor solution will represent 78.102 percent of the total variance in the data. The seven-factor solution is also consistent with Gorsuch (1983) who recommends that regardless of the method used to decide how many factors to retain, they should collectively account for at least 70 percent of the total variance.

Table 4.67
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	27.828	57.975	57.975	27.828	57.975	57.975	15.836
2	2.305	4.803	62.777	2.305	4.803	62.777	12.832
3	1.850	3.855	66.632	1.850	3.855	66.632	19.929
4	1.678	3.495	70.127	1.678	3.495	70.127	8.672
5	1.445	3.010	73.137	1.445	3.010	73.137	13.605
6	1.215	2.531	75.669	1.215	2.531	75.669	13.778
7	1.168	2.434	78.102	1.168	2.434	78.102	2.172
8	.914	1.904	80.007				
9	.815	1.698	81.705				
10	.718	1.497	83.202				
11	.697	1.452	84.653				

Extraction Method: Principal Components Analysis.

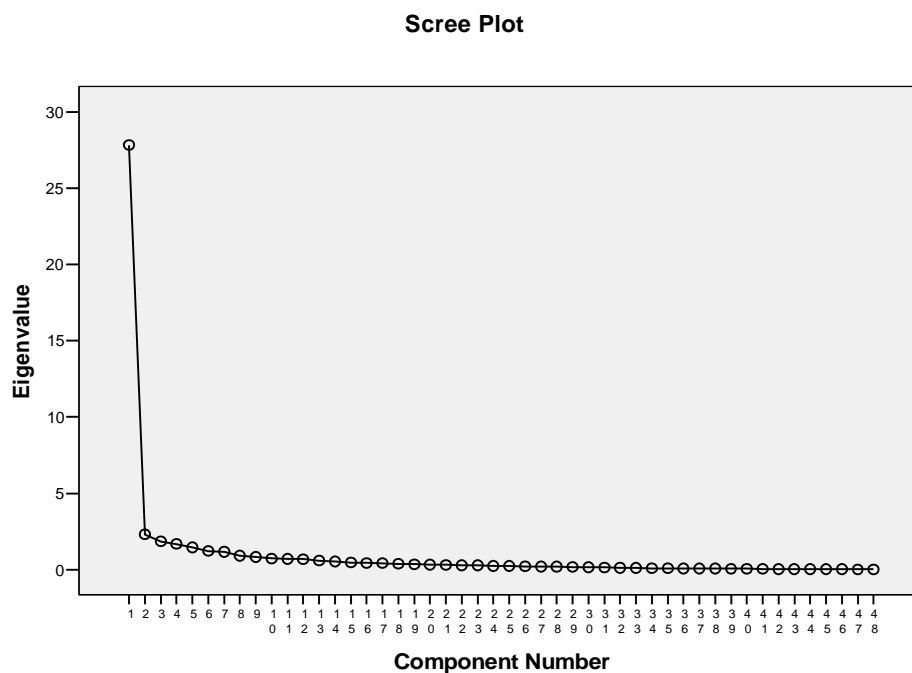
a When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Factor 1 is predominant with an eigenvalue of 27.828 and accounts for 57.975 percent of the variance. Factors 2-7 have relatively much smaller eigenvalues compared to factor 1.

Factors through 8 – 48 are insignificant as their eigenvalues are less than 1.0. and they explain less variance than a single variable. Therefore, these factors were ignored.

The superior position of Factor 1 is also evident in the Scree Plot presented in Figure 4.1. The Scree Plot begins to level off after component 7. It is apparent however that the scree essentially begins after factor 2 which is reflective of the supremacy of Factor 1 in the solution. The initial solution suggests that the number of factors to be extracted in the final solution should not exceed seven.

Figure 4.4
Scree Plot



4.2.13. Correlation Matrix (Factor Loadings)

Correlation Matrix shows the correlation among variables. Pearson's coefficient of correlation (r) was used as a measure of association to indicate the magnitude of correlation (Table 4.68).

Table 4.68

Interpretation of correlation co-efficients

Using Cohen's (1982) following criteria:

Correlation coefficient	Strength of relationship
0.19 and less	Very low
0.20-0.29	Low
0.40-0.69	Modest
0.70-0.89	High
0.90 and greater	Very high

The Correlation Matrix (Appendix 2) contains inter-correlations among items in scales. For the correlation matrix to be valid there must be some correlations greater than 0.30 ($r > 0.30$). Variables specified on the left hand side of the column in Appendix 3) correlate highly ($r \geq 0.700$) with variables specified on the right hand side, but not with other variables. The thirty-eight variables appear to be measuring the same thing (s). To be able to find the latent variables R factor analysis needs to be performed. Items that fail to satisfy the following criteria were deleted: (a) dominant loadings greater than 0.40, and (b) cross loadings less than 0.30.

4.2.14. Communalities (h^2)

The communality score refers to the proportion of the variance in the original variables that is accounted for by the factor solution. The Communalities Matrix (Appendix 8) shows that all communalities are less than one, and hence there is no spurious solution. Factor loadings of less than 0.30 were considered unacceptable and loadings between 0.3-0.4 just tolerable. All variables have a communality greater than 0.300. For reliable analysis, it is preferable that the factor solution should explain at least 50 percent of each of the original variable's variance.

To establish that variables can explain sufficient variance, communalities were examined. All communalities were greater than 0.50 with the lowest communality being 0.624. Hence, loadings are considered good and no variable needs to be removed from the list of variables. Also absence of any communality that is larger than 1.000 indicates that there is no spurious solution.

4.2.15. Unrotated Component Matrix

The Component Matrix generated is appropriate as each variable's loading is high on one factor (close to 1.000) and low (to close to zero) on other components. Interpretation of factor loadings is identical to the interpretation of correlation co-efficient (r) where:

$r > 0.50$ good correlation

$0.4 \leq r \leq 0.5$ acceptable

$0.3 \leq r < 0.4$ barely tolerable

$r < 0.3$ unacceptable (very weak correlation)

Factor loadings show that each variable loaded heavily on one factor, therefore, the component matrix structure is simple and there is no need to remove variables as the variables did not demonstrate a complex structure.

4.2.16. Rotated Component Matrix and discussion of findings

In general, the variables load on multiple factors complicate the analysis and interpretation of factor solutions. For this reason, rotation of factor axes is considered to obtain a clearer pattern among variables measured by way of re-orienting the factor loadings. Of the available alternative rotational strategies (oblique, varimax, quartimax, equimax and no rotation), the “varimax” approach has been adopted. The “varimax” is an orthogonal rotation of the factor axes which minimises the number of variables that load highly on a factor and re-distributes the variance accounted within the pattern of factor loadings.

Varimax rotates the axis in such a way that the two vertices remain 90 degrees perpendicular to each other. A varimax rotation with Kaiser normalisation resulted in a seven-factor solution. All seven had an eigenvalue greater than one. The first variable explained 58.230 percent of the variance and seven factors collectively explained 78.065 percent of the total variance. Inspection of the Rotated Component Matrix revealed that the following variables had higher correlations or loadings (0.40 or greater) on more than one component.

The factor structure obtained is clean indicating that the two variables did not load strongly on any one component. Significant loadings are spread over seven components. Following Kim and Mueller (1978), factors 3, 4, 5 and 7 were removed because each of these factors had less than three variables loaded on them. Even the few variables that loaded on removed components had marginal (just above 0.5) loadings. Furthermore, structures for factors 3 and 5 in particular were ambiguous with each loaded with variables that do not have much in common.

Factor loadings are presented in the Table 4.69.

Abbreviations used:

ASU: Assurance

RES: Responsiveness

REL: Reliability

EMP: Empathy

FLX: Flexibility

TAN: Tangibles

ALT: Alternate solutions

PRI: Price

PSY: Psychic costs

TEE: Time, effort and energy

VAL: Value

The Rotated Component Matrix contains some split loadings (loading significantly on more than one component). Presence of split loadings in the following variables indicates that extra care should be exercised when interpreting those variables. For this research, the identified split loadings are not considered material as they are mainly loaded on the two most prominent factors, namely factor 1 and factor 2.

Quick answers and solutions
Emergency service deliveries
Welcoming complaints
Provision of reliable service
Understand specific needs
Concerned about problems
Willingness to meet needs
Always provides help
Different services
Specialised expertise

Comprehensive product knowledge
Behaviour of employees

All other variables display simple structures with no variable highly loaded (greater than 0.400) on more than one component. Factors have been re-named. However, it should be noted that, by nature, naming factors is essentially subjective and is hardly a scientific process (Hair *et al.*, 1992). As shown in Table 4. 69, Factor 1 had the highest loadings on ASU (Assurance) dimension followed by REL (Reliability) dimension. To obtain a clearer pattern, the data were rotated using the Direct Oblimin method which also showed that ASU (Assurance) loadings were slightly stronger than RES (Responsiveness) loadings. Assurance includes behaviour of employees of the internal supplier that instills confidence in the internal buyer, trustworthiness as well as courtesy, competence, knowledge and skillfulness of the internal supplier.

Table 4.69
Seven-factor solution

Factor	Behaviour of employees	Feeling safe in dealings	Courtesy of internal supplier	Competence of internal supplier	Keep Informed of timing	Willingness to help	Rapid response	Listening To problems	Quick Answers and solutions	Emergency service deliveries	Welcoming Complaints	Provision of reliable service	Showing Interest in solving problems	Service right the first time	Provision Of accurate information	Telling truth	Best Interest At heart
1	.834	.555	.706	.664	.638	.638	.591	.681	.647	.551	.658	.655	.738	.675	.526	.584	.551
2																	
3																	
4																	
5																	
6																	
7																	

Factor	Identification of needs	Commitment to improvements	Willingness to meet needs	Always Provides help	Introduction of breakthrough solutions	Different services	Alternatives offered	Assistance In solving Problems	Specialised expertise	Comprehensive Product knowledge	Using new technology	Concern About problems	Always Us Internal services	Effort To reduce costs	TP easy to understand
1															
2	.673	.579	.550	.621	.765	.653	.746	.663	.512	.665	.759				
3												.500	.506		
4														.525	.753
5															
6															
7															

Factor	Meeting unique specs	TP and output competitiveness	When services are provided	Individual attention	Listening To problems	Rapid response	TP improves Accumulated value
1							
2							
3							
4							
5	.556	.667					
6			.732	.693	.550	.519	
7							.454

On the other hand, the responsiveness dimension includes timely communication to the internal buyer when services will be performed, willingness displayed by the employees of internal supplier to provide assistance to the internal buyer, responsiveness of employees of internal supplier in responding to requests expediently and efficiently, listening to their problems, provision of quick answers and solutions, ability to provide emergency service deliveries and welcoming complaints. Loadings on reliability and empathy dimensions are relatively lower. Factor one was re-named “Confidence”.

Factor 2 was loaded on both ALT (Alternate Solutions and Customisations) and FLX (Flexibility and Innovation). Alternate solutions and customisation loadings are relatively stronger than the flexibility items. The Alternate Solutions and Customisation was labeled “solution” and includes the capability to customize the service offering, ability to meet unique specifications, capability of offering a range of services, offering different services from its competitors, willingness to help should problems arise, possession of specialized expertise in the internal buyer’s area of activity, comprehensive knowledge about processes of the buyer’s business and utilisation of new technologies in resolving internal buyer’s problems.

The Flexibility dimension includes ability to identify needs before they are raised, commitment to improvements, willingness to meet needs beyond contract terms, provision of assistance whenever such assistance is needed by the internal buyer, introduction of breakthrough solutions and new technologies, and commitment to be one step ahead of what the competition offers.

Inspection of the Total Variance Table indicates that although a seven-factor solution was possible, based on the fact that Factor 1 is the most dominant factor, so much so, that on its own it can explain 57.975 percent of the variance. There is a large gap even between Factor 1 and Factor 2. Factor 2 explains 4.803 percent of the variance. Remaining factors (3-7) explain between 2.434 – 3.855 percent of the variance each. From a weighting point of view, given their eigenvalue scores and the percentage of variance that they explain, remaining factors appear to be insignificant.

The factor analysis revealed that the dominant factor in intra-divisional exchange of services is the responsiveness of the internal division. It is clear that the internal price does not play a significant role in internal transactions. The overall findings offer strong empirical support for the notion that although price is regarded as a component of sacrifice (Brady and Cronin, 2001), it does not correlate strongly with other dimensions of sacrifice and benefit.

One of the noteworthy findings of this research is that in contrast to the findings of several authors (Bitner and Hubner, 1994; Chang and Wildt, 1994; Drew and Bolton, 1987; Heskett *et al.* 1990; Zeithaml, 1988), it has found that price was a determinant of value. A qualification should be made that the prior research cited in the preceding sentence relates to the value perceived by external customers. Brooks, Lings and Botschen (1999) who also find that the tangibles dimension which was important for external customer is found to be unimportant for internal customers when evaluating internal service quality.

CHAPTER 5: CONCLUSIONS

5.1. Discussion of findings

The purpose of this research was to develop an in-depth understanding of the domestic transfer pricing processes and procedures in service organizations and examine the role of the domestic transfer price on the internal buyer's perception of value from the transaction.

The findings of this research suggest that transfer prices are mostly determined at the headquarters level which might indicate that internal departments do not always operate under free market conditions. With the headquarters setting transfer prices, it is expected that goal congruence would be one of the central objectives of the transfer pricing system. However, the findings indicate that the goal congruence is the third most important transfer pricing objective, with 'ease of understanding' being the principal objective. This research demonstrates that there are similarities in transfer pricing practices in both manufacturing and service businesses with the cost-based transfer pricing method being the most preferred method. Of cost-based transfer pricing methods, the most popular ones are 'full-cost plus' and 'full-cost at actual'. These provide support for the evidence reported in the accounting literature regarding how pricing decisions, in general, and transfer pricing decisions, in particular, are made arbitrarily and on an ad hoc basis. This is further supported by the lack of procedures to determine whether transfer pricing objectives have been achieved. Only about 25 percent of respondents reported the existence of such procedures.

Reliance on cost-based pricing is likely to give rise to arbitrary charges. As discussed in the thesis, the practice of determining prices in an ad hoc manner is not confined just to smaller firms but this is an industry-wide phenomenon.

The fact that performance of most of the responsibility centres is evaluated using divisional results is one of the contributing factors to the self-centred behaviour of divisions. This is also supported by the fact that opportunistic behaviour is reported to be the major source of conflicts arising from transfer pricing.

The findings indicate that about 79 percent of respondents do not employ value chain analysis and more than 92 percent do not use activity-based costing. This finding coupled with the cost-based transfer pricing method being their primary choice raises questions as to what extent respondent firms know their costs accurately. This is quite ironic because 95 percent of respondents regard control of operating costs as a matter of importance. Forty-eight percent of respondents reported 'better price' is the chief reason for outsourcing. If their outsourcing decision is made based on a cost and benefit analysis, then the cost dimension of this analysis appears to be unsound which may lead to inappropriate outsourcing decisions.

In internal transactions, only 33 percent of respondents indicate that value creation for internal customer is important in setting a transfer price. In this study, no association was observed between domestic transfer price and internal customer perceived value. Only 30 percent of respondents report that the satisfaction of internal customer may lead to the satisfaction of external customer.

Service organisations' external customer orientation is also supported by the finding that development of new service products for internal customers is a priority for only 12.5 percent of respondents. Only less than a quarter of respondents can relate value for internal customers to competitive advantage.

Findings discussed earlier can be expected to result in the lack of internal customer orientation which is evident because only 30 percent of respondents believe there is an association between satisfaction of internal customers and satisfaction of external customers.

Factor analysis performed here indicated that responsiveness is the most important criterion in internal transactions and that internal price is less important. This finding is consistent with findings of other researchers (Wisner and Stanley, 1999; Frost and Kumar, 2000). It is evident that service firms are more interested in external customers, and relatively little attention is paid to internal customer value. This may be partly explained by the fact that customer value is an off-balance sheet item and the results of external customer orientation is more readily available.

Finally, although there is a clear emphasis on the need for case study based research about transfer pricing, an exploratory research would help identify the areas that require further research using a case study methodology.

5.2. Contributions of this research

This is the first research that examines various aspects of transfer pricing, including transfer pricing methods, of exclusively service organisations in Australia. Another key contribution of this research to the accounting literature is that it is a pioneering study that attempts to examine transfer pricing in association with internal customer perceived value.

The findings presented in this thesis would help managers to understand current issues and practices. From this perspective, the current research is expected to make a contribution towards bridging the gap between research and actual managerial pricing practice.

5.3. Limitations of the research

Inherent limitations of mail questionnaires are documented in the literature (Ryan, Scapens and Theobald, 1992). But as Drury and Tales (1995) indicate, surveys can be used as a means to provide a broad overview of current practice. The current project is exploratory and is designed to enhance our understanding in an area where very little empirical work has been conducted. Generalisation of the findings was not intended from the beginning.

5.4. Implications for further research

The fact that most firms prefer to price their goods and services based on costs – most probably inaccurate- can potentially harm the prospects of a business. One of the key deficiencies in transfer pricing research is that there has hardly been any empirical evaluation of the reasons behind using any particular transfer price. Despite the evidence that most firms do not know their costs accurately, the reasons behind the slow adoption rate of activity-based costing warrant further research.

Porter's value chain analysis is devised with manufacturing, rather than service organisations in mind. The present study provides some insight about the notion of value in the context of transfer prices. More specifically, preliminary findings of this research indicate that there are significant differences in the value chains of manufacturing and service organizations. Further research is needed for the configuration of value chain for service firms. Also, case study research that involves measuring value along the value chain would be one means of shedding light on transfer pricing in the context of a specific value chain.

Finally, service organizations focus on external customers at the expense of internal customers. This insight suggests that research is needed to ascertain whether internal orientation with transfer price in mind leads to external customer satisfaction, higher corporate income, or competitive advantage.

REFERENCES

- Abdallah, W. M. (1989) International transfer pricing policies, Quorum Books.
- Abdel-khalik, A.R. and Lusk, E.J. (1974) "Transfer pricing-a synthesis", *The Accounting Review*, 49(1), 8-23.
- ABS (Australian Bureau of Statistics) (2004) ABS 5204.0 Australian System of National Accounts 2003-04.
- ABS (Australian Bureau of Statistics) (2007) 1301.0 Year Book Australia, 2007.
- Alam, M. and Hoque, Z. (1995) "Transfer pricing in New Zealand", *Chartered Accountants Journal*, April, 32-34.
- Abratt, R. and Pitt, L. (1985) "Pricing practices in two industries", *Industrial Marketing Management*, 14, 301-306.
- Ackelsberg, R. and Yukl, G. (1979) „Transfer pricing and conflict resolution in organization“, *Decision Sciences*, 10, July, 387-398.
- Ackoff, R. (1993) "Foreword in William E. Halal et al. (1993) Internal markets: bringing the power of free enterprise inside the organization, Wiley.
- Acton, D.D. and Cotton, W.D. (1997) "Activity-based costing in a university setting", *Journal of Cost Management*, March/April, 11(2), 32-38.
- Adamson, J. D. (1988) "Becoming bilingual can help solve those internal clashes", *Bank Marketing*, 20(10), 4, 104.
- Adler, R.W. (1996) "Transfer pricing for world-class manufacturing", *Long Range Planning*, 29(1), 69-75.
- Alam, M. and Hoque, Z. (1995) "Transfer pricing in New Zealand", *Chartered Accountants Journal*, April, 32-34.
- Albrecht, K. (1990) Service within, Dow Jones Irwin.
- Albrecht, K. (1992) "The only thing that matters", *Executive Excellence*, 9, November, 7.
- Al-Eryani, M. F., Alam, P., and Akhter, S.H. (1990) „Transfer pricing determinants of U.S. multinationals“, *Journal of International Business Studies*, Third Quarter, 409-425.

Anderson, E. and Oliver, R. (1987) "Perspectives on behaviour-based versus outcome-based sales force control systems", *Journal of Marketing*, 51, 76-88.

Anderson, J.C. and Narus, J.A. (1998) Business market management: understanding, creating and delivering value, *Harvard Business School Press*.

Anderson, J. C. and Narus, J.A. (1995) "Capturing the value of supplementary services", *Harvard Business Review*, January-February, 73(1), 5-83.

Anthony, R. N. and Govindarajan, V. (1998) Management control systems, Ninth Edition, Irwin McGraw-Hill.

Anderson, E. W., Fornell, C. and Lehmann, D. R. (1994) "Customer satisfaction, market share, and profitability: findings from Sweden", *Journal of Marketing*, 58, July, 53-66.

Ansoff, I. (1965) Corporate strategy, McGraw-Hill.

Armstrong, J. S. and Overton, T.S. (1977) "Estimating non-response bias in mail surveys", *Journal of Marketing Research*, 14(3), 396-402.

Arpan, J. S. (1972) International intracorporate pricing: Non-American systems and views, *Journal of International Business Studies*, 1- 18.

Assael, H. (1995) Consumer behaviour and marketing action, 5th edition, South-Western College Publishing.

Athanassopoulos, A. D. (2000) "Customer satisfaction cues to support market segmentation and explain switching behaviour", *Journal of Business Research*, 47, 191-207.

Atkinson, A. (1987) Intra-firm cost and resource allocations: theory and practice, The Canadian Academic Accounting Association.

Babbie, E. R. (1989) The practice of social research, Wadsworth.

Baden-Fuller, C. and Stopford, J. M. (1994) "Rejuvenating the mature business", Harvard Business School Press.

Bafcop, J. H. , Bouquin, H. and Desreumaux, A. (1991) "Prix de cessions internes: regard sur les pratiques des entreprises Françaises [Transfer prices: a look at the practices of French enterprises]", *Revue Française de Gestion*, Jan-Feb, 103-118.

Barney, J. (1991) "Firm resources and sustained competitive advantage", *Journal of Management*, 17(1), 99-120.

- Barnes, J. (1989) "The role of internal marketing: if the staff won't buy it, why should the customer?", *Irish Marketing Review*, 4(2), 11-21.
- Baumol, W.J. and Fabian, T. (1964) "Decomposition, pricing for decentralization and external economies", *Management Science*, September, 1-31.
- Becker, G.S. (1965) "Theory of allocation of time", *Economic Journal*, 75, September, 493-517.
- Belk, R.W., Sherry, J. F. and Wallendorf, M. (1988) "Naturalistic inquiry into buyer and seller behaviour at a swap meet", *Journal of Consumer Research*, 14, March, 449-470.
- Benke, R. L. Jr. and Edwards, J. D. (1980) Transfer pricing: techniques and uses, National Association of Accountants.
- Berry, L. L. (1981) "The employee as customer", *Journal of Retail Banking*, 3(1), 33-40.
- Berry, L. L. (1984) "Service marketing is different" in Service Marketing, C. Lovelock, Prentice Hall, 29-37.
- Berry, L. L. (1995) On great service, The Free Press.
- Berry, L.L. and Parasuraman, A. (1991) Marketing service: competing through quality, The Free Press.
- Berry, L. L. and Yadav, M. S. (1996) "Capture and communicate value in the pricing of services, *Sloan Management Review*, summer, 41- 51.
- Bharadwaj, S. G., Varadarajan, P. R. and Fahy, J. (1993) "Sustainable competitive advantage in service industries", *Journal of Marketing*, 57(4), 83-100.
- Bhimani, A. and Brimson, J. (1989) "Advanced manufacturing technology and strategic perspectives in management accounting", *European Accounting News*, January.
- Bick, G., Brown, A. B. and Abratt, R. (2004) "Customer perceptions of the value delivered by retail banks in South Africa", *The International Journal of Bank Marketing*, 22(5), 300-318.
- Bingham, F. Jr. and Raffield, B. (1990) Business to business marketing management, Irwin.

Blaikie, N. (2003) *Analyzing quantitative data: from description to explanation*, Sage Publications.

Blaikie, N. (1993) *Approaches to social enquiry*, Polity Press.

Blois, K. (2003) "Using value equations to analyze exchanges", *Marketing Intelligence and Planning*, 21(1), 16-22.

Bolton, R. N. and Drew, J. H. (1991) "A longitudinal analysis of the impact of service changes on customer attitudes", *Journal of Marketing*, 55(1), 1-9.

Bonoma, T., Victoria, L., Crittenden, R., and Dolan, J. (1988) "Can we have rigor and relevance in pricing research?", T. M. Devinney, (Eds) *Issues in Pricing: Theory and Research*, Lexington Books.

Borch, O.J. and Arthur, M.B. (1995) "Strategic networks among small firms: implications for strategy research methodology", *Journal of Management Studies*, 32(4), 419-441.

Borkowski, S.C. (1992) "Choosing a transfer pricing method: a study of the domestic and international decision-making process", *Journal of International Accounting, Auditing and Taxation*, 1, 33-49.

Borkowski, S. C. (1990) Environmental and organizational factors affecting multinational transfer pricing, *advances in international accounting*, 5, 173-192.

Bowen, J. (1990) "Development of taxonomy of services to gain strategic insights", *Journal of the Academy of Marketing Science*, 18, Winter, 43-49.

Boyd, W.L., Leonard, M. and White, C. (1994) "Customer preferences for financial services: an analysis", *International Journal of Bank Marketing*, 12, 9-15.

Boyns, T., Edwards, J. R. and Emmanuel, C. (1999) "A longitudinal study of the determinants of transfer pricing change", *Management Accounting Research*, 10, 85-108.

Bradley, F. (1995) *Marketing management: providing, communicating and delivering value*, Prentice Hall.

Bremser, W. G. and Licata, M. P. (1991) "Making transfer pricing work for your firm", *Corporate Controller*, 4(2), 47-51, 57.

Brady, M. K. and Cronin, J. J. (2001) "Some new thoughts on conceptualizing perceived service quality: a hierarchical approach", *Journal of Marketing*, 65, July, 34-49.

Brignall, T.J., Fitzgerald, L., Johnston, R. and Silvestro, R. (1991) "Product costing in service organizations", *Management Accounting Research*, 2, 227-248.

Brinker, B. (1994) "Performance measurement and red faces", *Cost Management*, Fall, 3-4.

Brooks, R. F., Lings, I. N. and Botschen, M. A. (1999) "Internal marketing and customer driven wavefronts", *The Service Industries Journal*, 19(4), 4968.

Bromwich, M. and Bhimani, A. (1994) *Management accounting: pathways to progress*, Chartered Institute of Management Accountants (UK).

Brown, T., Churchill, Jr., G.A. and Peter, J. P. (1993) "improving the measurement of service quality", A.C. Nielsen Working Paper, No 91-4, University of Wisconsin-Madison.

Brown, S. L. and Eisenhardt, K.M. (1998) *Competing on the Edge*, Harvard Business School Press.

Brownell, P. (1995) *Research methods in management accounting*, Monograph No.2, Coopers & Lybrand Accounting Research.

Burns, J.O. (1980) "Transfer pricing decisions in US multinational corporations", *Journal of International Business Studies*, 10(2), fall, 23-39.

Business Week (1981) "Boosting productivity at American Express", October, 5, 62, 66.

Buttle, F. (1997) *Hotel and food service marketing: a managerial approach*, Holt, Rinehart & Winston.

Butz, H. E. Jr. and Goodtstein, L.D. (1996) "Measuring customer value: gaining the strategic advantage", *Organizational Dynamics*, 24(3) winter, 63-78.

Buzzell, R. D. and Gale, B. T. (1987) *The PIMS principles: linking strategy to performance*, The Free Press.

Byrne, B. M. (1994) *Structural equation modeling with EQS and EQS/Windows: Basic concepts, applications and programming*, Sage Publications.

Campbell, D. R. and Fiske, D. W. (1959) "Convergent and discriminant Validation by the multitrait-multimethod matrix", *Psychological Bulletin*, 56, 81-105.

Carson, D., Gilmore, A., Perry, C. and Gronhaug, K. (2001) *Qualitative marketing research*, Sage Publications.

- Caruana, A., Money, A.H. and Berhton, P. R. (2000) "Service quality and satisfaction-the moderating role of value", *European Journal of Marketing*, 34(11/12), 1338-1352.
- Cespedes, F. V. (1995) *Concurrent marketing*, Harvard Business School Press.
- Chalos, P. and Haka, S. (1990) "Transfer pricing under bilateral bargaining", *The Accounting Review*, 65(3), 624-641.
- Chan, C. W. (1998) "Transfer pricing negotiation outcomes and the impact of negotiator-mixed motives and culture: empirical evidence from the U.S. and Australia", *Management Accounting Research*, 9, 139-161.
- Chang, T.Z. and Wildt, A.R. (1994) "Price, product information and purchase intention: An empirical study", *Journal of the Academy of Marketing Science*, 22(1), 16-27.
- Chaston, I. (1994) "Internal customer management and service gaps within the UK manufacturing sector", *International Journal of Operations and Production*, 14(9), 45-56.
- Chaston, I. (1995) "A typology for evaluating branch-level perceptions of internal customer management processes within the UK clearing banks", *The Service Industries Journal*, 15(3), 332-350.
- Chenhall, R. H. (1979) "Some elements of organisational control in Australian divisionalised firms", *Australian Journal of Management*, Supplement, Vol.4, No.1, April, 1-36.
- Chenhall, R. H. and Langfield-Smith, K. (1998) Adoption and benefits of management accounting practices: an Australian study, *Management Accounting Research*, (9), 1-19.
- Choudry, N. (1986) "In search of relevance in management accounting research", *Accounting and Business Research*, Winter, 21-36.
- Churchill, G. A. (1979) "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, 16 (1), February, 64-73.
- Clark, C. (1940) *The Conditions of Economic Progress*, Macmillan.
- Claycomb and Frankwick, G. (1997) "The Dynamics of buyers' perceived costs during the relationship development process", *Journal of Business-to-Business Marketing*, 4(1), 1-37.

Colbert, G. J. and Spicer, B. H. (1995) "A multi-case investigation of a theory of the transfer pricing process", *Accounting, Organizations and Society*, 20(6), 423-456.

Collins, F. and Munter, P. (2001) "ABC for service firms: what's your real product?" *The Journal of Corporate Accounting and Finance*, March/April, 12(3) 5-8.

Collis, J. and Hussey, R. (2003) *Business research*, 2nd edition, Palgrave Macmillan.

Cooper, R. and Slagmulder, R. (1998) "Cost management for internal markets", *Management Accounting (US)*, 79(10),

Corey, R. E. (1982) *Note on pricing strategy*, Harvard Business School Press.

Cornelius, I and Davies, M. (1997) *Shareholder Value*, FT Financial Publishing.

Cox, G. (1997) "Customer focus: a commercial imperative", *Managing Service Quality*, 7(1), 27-30.

Coyne, K. (1985) "Sustainable competitive advantage-What it is and what it isn't", *Business Horizons*, 29 (January-February), 54-61.

Crain, T. L. and Stitts, R.H. (1994) "A comparison of gross profit margins between foreign-controlled domestic corporations and comparable U.S.-controlled domestic corporations", *Journal of International Accounting, Auditing and Taxation*, 1, 85-101.

Cravens, K.S. and Shearon, W.T. Jr. (1997) "An outcome-based assessment of international transfer pricing policy", *The International Journal of Accounting*, 31(4), 419-443.

Cressman, G.E. (1999) "Commentary on 'Industrial pricing: theory and managerial practice'", *Marketing Science*, 18(3) 455-459.

Crompton, W. H. (1972) "Transfer pricing: A proposal", *Management Accounting*, 53, April, 40-48.

Cronbach, L. J. (1951) "Coefficient alpha and the internal structure of tests" *Psychometrika*. 16, 297-334.

Cronin, J. J. and Brady, M.K. and Hunt, T.M. (2000) "Assessing the effects of quality, value and customer satisfaction on consumer behavioural intentions in service environments", *Journal of Retailing*, 76 (2).

Cronin, J. J. and Taylor, S. A. (1992) "Measuring service quality: a re-examination and extension, *Journal of Marketing*, August.

Cronin, J. J. Brady, M. K., Brand, R.R., Hightower, R. Jr., Shemwell, D.J. (1997) "A cross-sectional test of the effect and conceptualisation of service value", *The Journal of Services Marketing*, 11(6), 375-391.

Czepiel, J. A. (1992) *Competitive marketing strategy*, Prentice Hall.

Dabholkar, P., Shepherd, C.D. and Thorpe, D. I. (2000) "A comprehensive framework for service quality: an investigation of critical conceptual and measurement issues through a longitudinal study", *Journal of Retailing*, 76(2), 139-173.

Daniels, J. D., Ogram, E. E. and Radebaugh, L. (1976) *Multinational business, environments and operations*, Addison-Wesley.

D'Aveni, R. A. (1994) *Hyper competition*, The Free Press.

Davis, T. R. 1991. "Internal service operations: strategies for increasing their effectiveness and controlling their cost", *Organizational Dynamics*, 20(2), 5-22.

Davis, T. R. (2001) Integrating internal marketing with participative management, *Management Decision*, 39(2), 121-132.

Day, G. S. (1990) *Market driven strategy: processes for creating value*, Free Press.

Day, G. S. and Nedungadi, P. (1994) "Managerial representations of competitive advantage", *Journal of Marketing*, 58, April, 31-44.

Day, G. and Wensley, R. (1988) "Assessing advantage: a framework for diagnosing competitive advantage", *Journal of Marketing*, April, 1-20.

Dean, J. (1955) "Decentralisation and intracompany pricing, *Harvard Business Review*, 38(1), 65-74.

Dearden, J. (1960) "Interdivisional Pricing", *Harvard Business Review*, 38 (1), 117-125.

- Dearden, J. (1967) "Computers: No impact on divisional control", *Harvard Business Review*, January-February, 99.
- Dekker, H.C. (2003) "Value chain analysis in interfirm relationships: a field study", *Management Accounting Research*, 14, 1-23.
- Deming, W.E. (1986) *Out of the crisis*, MIT, Cambridge.
- Denton, D.K. (1991) "Horizontal management", Lexington Books.
- Dierickx, I and Cool, K. (1989) "Asset stock accumulation and the sustainability of competitive advantage", *Management Science*, 35, 1504-1511.
- Drew, J. H. and Bolton, R. N. (1987) "Service Value and Its measurement: Local telephone Service", Suprenant, C., *Add value to your service: 6th Annual Services Marketing Proceedings*, American Marketing Association.
- Drucker, P. (1985). *Innovation and entrepreneurship*, Harper and Row.
- Drury, C. and Bates, H. (1979) *Data processing charge-back systems: theory and practice*, The Society of Management Accountants of Canada, April.
- Drury, C. and Dugdale, D. (1992) "Surveys of management accounting practice" in Drury, C. (1992) *Management Accounting Handbook*, CIMA, Butterworth and Heinemann.
- Drury, C. (1994) *Survey of management accounting in UK building societies*, CIMA.
- Drury, C. and Tayles, M. (1995) "Surveys of management accounting practice", *Management Accounting Research*, 6, 267-280.
- Drury, C., Braund, S., Osborne, P. and Tayles, M. (1993) "A survey of management accounting practices in UK manufacturing companies", *Certified Research report 32*, Association of Chartered Certified Accountants.
- Dunteman, G. H. (1989) *Principal components analysis*, Sage Publications.
- Durgee, J. F., O'Connor, G.C. and Veryzer, R.W. (1996) "Observations, translating values into product wants", *Journal of Advertising Research*, November/December, 90-110.

Dutta, S., Zbaracki, M. J. and Bergen, M. (2003) "Pricing process as a capability: A resource-based view", *Strategic Management Journal*, July, 24(7), 615- 629.

Easterby-Smith, M., Thorpe, R. and Lowe, A. (1995) *Management research: an introduction*, Sage Publications.

Eccles, R.G. (1983) "Control with fairness in transfer pricing", *Harvard Business Review*, November-December, 149-161.

Eccles, R.G. (1985) *Transfer pricing problem: a theory for practice*, Lexington Books.

Eccles, R. and Pyburn, P. (1982) "Creating a comprehensive system to measure performance", *Management Accounting*, October, 74(4), 41-44.

Edvardsson, B., Larsson, G. and Setterlind, S. (1997) "Internal service quality and the psychological work environment: an empirical analysis of conceptual interrelatedness", *Service Industries Journal*, 17(2), 252-263.

Eisenhardt, K. (1989) Building Theories from case study research, *The Academy of Management Review*, 14, 532-550.

Elliott, J. (1998) "International transfer pricing: a survey of UK and non-UK groups", *Management Accounting (UK)*, 76(10), CIMA. 48-56.

Elwood, S. (1996) "Full-cost pricing rules within the National Health Service internal market-accounting choices and the achievement of productive efficiency", *Management Accounting Research*, 7(1), 25-51.

Emmanuel, C. R. (1977) Transfer pricing: A diagnosis and possible solution to dysfunctional decision making in the divisionalised company", *Management International Review*, 17(4), 45-49.

Emmanuel, C. and Mehafdi, M.(1994) *Transfer pricing*, Academic Press.

Ernst and Young (1997) *Transfer pricing 1997 Global survey: current practices, perceptions and trends*,

Evans, P. (1975) "Multiple hierarchies and organizational control, *Administrative Science Quarterly*, 17, 574-585.

Evans, M.G. (1991) "The problem of analysing multiplicative composites: interactions revisited", *American Psychologist*, 46, 6-15.

- Evans, H. and Ashworth, G. (1996) "Survey conclusions: wake up to the competition", *Management Accounting* (UK), May, 16-18.
- Evans, J. R. and Lindsay, W. M. (2002) *The management and control of quality*, Fifth edition, South-Western Thomson.
- Fama, E. (1980) "Agency [problems and the theory of the firm]", *Journal of Political Economics*, 88, 258-307.
- Farner, S., Luthans, F. and Sommer, S. M. (2001) "An empirical assessment of internal customer service", *Managing Service Quality*, 11(5), 350-358.
- Ferreira, D. and Merchant, K.A. (1992) Field research in management accounting and control: a review and evaluation, *Accounting, Auditing and Accountability Journal*, 5(4), 3-34.
- Fielding, N.G. and Fielding, J. I. (1986) *Linking data*, Sage Publications.
- Finn, A. (1985) A Theory of the consumer evaluation process for new product concepts, *Research in Consumer Behaviour*, 1, 35-65.
- Finnie, J. (1978) "Transfer pricing practices", *Management Accounting* (UK), December, 494-497.
- Fisk, R.P., Brown, S.W. and Bitner, M.J. (1993) "Tracking the evolution of the services marketing literature", *Journal of Retailing*, 69(1), 61-103.
- Fitzgerald, L., Johnston, R., Brignall, T.J., Silvestro, R. and Voss, C. (1992) *Performance measurement in service businesses*, CIMA.
- Fontana, A. and Frey, J. H. (1994) Interviewing: The Art of Science, in N. K. Denzin and Y.S. Lincoln (eds), *The Handbook of Qualitative Research*, Sage.
- Fornell, M., Johnson, M., Anderson, E.A., Cha, J. and Bryan, B. E. (1996) "The American customer satisfaction index: nature, purpose and findings" *Journal of Marketing*, 60, October, 7-18.
- France, N., Da Rold, C. and Young, A. (2002) "Services value chain reshapes IT services industry", Gartner Group Research, No. AV-21-3090, 1-4.
- Fremgen, J. M. (1970) "Transfer pricing and management goals", *Management Accounting*, December, 25- 31.

Fremgen, J.M. and Liao, S.S. (1981) "The allocation of corporate indirect costs", National Association of Accountants.

Frost, F.A. and Kumar, M. (2000) "INTSEVQUAL-an internal adaptation of the GAP model in a large service organization", *Journal of Services Marketing*, 14 (5), 358-377.

Gale, B.T. (1994) Managing customer value, The Free Press.

Gannes, S. (1988) "America's fastest growing companies", *Fortune*, May 23, 28-40.

George, W. R. (1977) "The retailing of services: a challenging culture", *Journal of Retailing*, 85-98.

George, W.R. (1990) "Internal marketing and organizational behaviour: a partnership in developing customer-conscious employees at every level", *Journal of Business Research*, 20(1), 63-70.

George, W. R. (1977) "The retailing of services: a challenging future", *Journal of Retailing*, Fall, pp. 85-98.

George, W.R. and Gronroos, C. (1989) Developing customer employees at every level-internal marketing", in Handbook of Services Marketing, AMACOM.

Gerstein, M. S. (1987) The technology connection, Addison-Wesley.

Ghoshal, S. and Moran, P. (1996) "Bad practice: a critique of the transaction cost theory", *Academy of Management Review*, 21, 13-47.

Gill, J. and Johnson, P. (1997) Research methods for manager, second edition, Paul Chapman.

Glaser, B. (1978) Theoretical sensitivity, Sociology Press.

Glaser, B. and Strauss, A. (1967) The discovery of grounded theory: strategies for qualitative research, Aldine.

Gorsuch, R. L. (1983) Factor Analysis, Second Edition, Erbaum.

Goulding, C. (1999) Grounded theory: some reflections on paradigm, procedures and misconceptions, Working Paper Series, University of Wolverhampton, June, Working Paper 006/99.

Govindarajan, V. and Ramamurthy, B. (1983) "Transfer pricing policies in Indian companies, *Chartered Accountant* (India), 32(5), 296-301.

Govindarajan, V. and Shank, J.K. (1992) "Strategic cost management: tailoring controls to strategies", *Cost Management*, Fall, 14-24.

Grabski, S. (1985) "Transfer pricing in complex organizations: a review and integration of recent empirical and analytical research", *Journal of Accounting Literature*.

Granick, D. (1975) "National differences in the use of internal transfer prices", *California Management Review*, summer, 17, 28-40.

Grant, R. M. (1991) Contemporary strategy analysis, Blackwell Publishers.

Gray, S. J. and Radebaugh, L. H. (1984) "International segment disclosures by US and UK multinational enterprises: a descriptive study", *Journal of Accounting Research*, 22(1), 351-360.

Green, F. B. and Amenkhienan, F.E. (1992) "Accounting innovations: a cross-sectional survey of manufacturing firms", *Journal of Cost Management*, 6, 58-64.

Greene, W.E., Walls, G. D., and Schrest, L.J. (1994) "Internal marketing: the key to external marketing success", *Journal of Services Marketing*, 8(4), 5-13.

Grewal, D., Monroe, K.B. and Krishnan, R. (1998) "The effect of price-comparison advertising on buyers' perception of acquisition value, transaction value and behavioural intentions", *Journal of Marketing*, 62, April, 46-59.

Gronroos, C. (1978) "A service-oriented approach to the marketing of services", *European Journal of Marketing*, 12(8), 588-601.

Gronroos, C. (1981) "Internal marketing: an integral part of marketing theory" in Donnelly, J. H. and George, W. R. (Eds), *Marketing of Services*, American Marketing Association, 232-238.

Gronroos, C. (1982) Strategic marketing and marketing in the service sector, research reports of Swedish School of Economics and Business Administration, Report Number 8, Helsinki, Finland.

Gronroos, C. (1984) "A Service Quality Model and Its Marketing Implications", *European Journal of Marketing*, 18(4), 36-44.

Gronroos, C. (1985) "Internal marketing: theory and practice", in Bloch, T.M. et al. (Eds), *Services marketing in a changing environment*, American Marketing Association, 41-74.

Gronroos, C. (1990) *Service management and marketing: managing the moments of truth in service competition*, Lexington Books.

Gronroos, C. (1995) "Relationship marketing: The strategy continuum", *Journal of the Academy of Marketing Science*, 23(4), 252-254.

Gronroos, C. (2001) "The perceived service quality concept-a mistake?", *Managing Service Quality*, 11(3), 150-152.

Grosse, R. (1996) "International technology transfer in services", *Journal of International Business Studies*, Fourth Quarter, pp. 781-800.

Groth, J. (1995) "Important factors in the sale and pricing of services", *Management Decision*, 33(7), 29-34.

Guba, E. and Lincoln, Y.S. (1987) *Effective evaluation*, Jossey-Bass.

Guilding, C., Cravens, K. and Tayles, M. (2000) "An international comparison of strategic management accounting practices", *Management Accounting Research*, 11, 113-135.

Gummesson, E. (1991) *Qualitative methods in management research*, Sage.

Gummesson, E. (1987) "The new marketing: developing long-term interactive relationships", *Long Range Planning*, 20, August, 10-20.

Gwinner, K. P., Gremler, D.D. and Bitner, M.J. (1998) "Relational benefits in services industries: The customer's perspective", *Journal of the Academy of Marketing Science*, 26(2), 101-114.

- Hagerty, M.R. (1978) Model testing techniques and price quality tradeoffs", *Journal of Consumer Research*, 5, 194-205.
- Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (1992) Multivariate data analysis, 3rd edition, Macmillan.
- Hair, J.F. Jr., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R. L. (2006) Multivariate Data Analysis, 6th edition, Pearson.
- Halal, W.E., Geranmayeh, A. and Pourdehnad, J. (1993) Internal markets: bringing the power of free enterprise inside the organization, Wiley.
- Hallowell, R. (1996) "The relationship of customer satisfaction, customer loyalty and profitability: an empirical study", *The International Journal of Service Industry Management*, 7(40), 27-42.
- Hamel, G. (2000) Leading the revolution, Harvard Business School Press.
- Hamel, G. and Prahalad, C. K. (1994) Competing for the future, Harvard University Press.
- Handfield, R.B. and Nicholls, E. L. Jr. (1999) Introduction to supply chain management, Prentice Hall.
- Harari, O. (1991) "Should internal customers exist?" *Management Review*, 80(7), 41-43.
- Hardy, L. (1987) Successful business strategy: how to win in the marketplace, Kogan Page.
- Harmon, E., Hensel, S. C. and Lukes, T.E. (2006) "Measuring performance in services", *McKinsey Quarterly*, Number 1.
- Harrison, R. and Wilkes, F.M. (1975) Cost-plus pricing: constraints and opportunities, Working Paper No.22, University of Aston Management Centre.
- Hart, C.W. (1995) "The power of internal guarantees", *Harvard Business Review*, 64-73.
- Hart, C.W. and Bogan, C. (1992) The Baldrige, McGraw-Hill.
- Hay, M. and Williamson, P. (1991) The Strategy Handbook, Basic Blackwell.

Hergert, M. and Morris, D. (1989) "Accounting data for value chain analysis", *Strategic Management Journal*, 10(2), March/April, 175-188.

Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E. and Schlesinger, L.A. (1994) "Putting the service-profit chain to work", *Harvard Business Review*, March-April, 164-174.

Heskett, J. L., Jones, T. O., Loveman, G.W., Sasser, W. E. and Schlesinger, L.A. (1994) "Putting the service profit chain to work", *Harvard Business Review*, 72(2), 164-174.

Heskett, J. L., Sasser, W. E. Jr., and Schlesinger, L.A. (1997) *The service profit chain*, The Free Press.

Heskett, J. L. and Schlesinger, L. A. (1994) "Putting the service profit chain to work", *Harvard Business Review*, 65, March-April, 165-174.

Hiebeler, R., Kelly, T. B. And Ketteman, C. (1998) *Best Practices: Building Your Business with Customer-Focused Solutions*, Simon & Schuster.

Higgins, K. T. (1998) "The value of customer value analysis", *Marketing Research*, 10, Winter/Spring, 39-44.

Hill, C. W. and Jones, G. R. (2001) *Strategic management theory*, Fifth Edition, Houghton Mifflin.

Hilton, I. H. (1981) *An investigation into transfer price policies used by firms in industry*, Unpublished Thesis, The University of Melbourne.

Ho, D.C. and Cheng, E.W. (1999) "Quest for value mix", *Managing Service Quality*, 9(3), 204-208.

Hoffman, K.K. and Arnold, D. R. (1989) "Professional service pricing: An extended cost-oriented approach", *Journal of Professional Services Marketing*, 5(1), 29-39.

Hogg, G., Carter, S. and Dunne, A. (1998) "Investing in people: internal marketing and corporate culture", *Journal of Marketing Management*, 14, 879-895.

Holbrook, M. (1994) The nature of customer value: an anthology of services in the consumption experience", Rust, R.T. and Oliver, R.L. Service Quality: New Directions in Theory and Practice, Sage Publications, 21-71.

Hiber, G. P and Power, D. J. (1985) "Retrospective reports of strategic-level managers: guidelines for increasing their accuracy", *Strategic Management Journal*, 6, 171-180.

Higgins, K. T. (1998) "The value of customer value analysis", *Marketing Research*, 10, Winter-Spring, 39-44.

Hilton, I. H. (1981) An investigation into transfer price policies used by firms in industry, Unpublished Thesis, The University of Melbourne.

Hirschleifer, J. (1956) "On the economics of transfer pricing", *Journal of Business*, 29, 172-184.

Hoffman, K.K. and Arnold, D. R. (1989) "Professional service pricing: An extended cost-oriented approach", *Journal of Professional Services Marketing*, 5(1), 29-39.

Horngren, C. T. and Foster, G. (1991) Cost accounting: A managerial emphasis, Prentice-Hall.

Horsburgh, D. (2003) Evaluation of qualitative research, *Journal of Clinical Nursing*, 12, 307-312.

Hoshower, L.B. and Mandel, L.A. (1986) "Transfer pricing policies of diversified US based multinationals", *International Journal of Accounting*, 22(1), Fall, 51-60.

Howel, A. R. and Soucy, R.S. (1990) "Customer profitability: as critical as product profitability", *Management Accounting*, 43-47.

Hrisak, D. (1996) "The controller as business strategist", *Management Accounting (US)*, December, 48-9.

Huber, F., Hermann, A. and Morgan, R. E. (2001) "Gaining competitive advantage through customer value oriented management", *Journal of Consumer Marketing*, 18(1), 41-53.

- Hudson, L. and Ozanne, J. (1988) "Alternative ways of seeking knowledge in consumer research", *Journal of Consumer Research*, 14, march, 508-521.
- Hunt, S.D. and Morgan, R.M. (1995). "The competitive advantage theory of competition", *Journal of Marketing*, 59(2), April, 1-15.
- Hussain, M and Gunasekaran, A. (2001) "Activity-based cost management in financial services industry", *Managing Service Quality*, 11(3), 213-223.
- Hussain, M. and Kock, S. (1994) Activity based costing in service management, in Kunst, P and Lemmink, J. (eds), *Managing Service Quality*, Paul Chapman Publishing.
- Hutcheson, G. and Sofroniou, N. (1999) The multivariate social scientist: introductory statistics using generalized linear models, Sage Publications.
- IBIS (1999) The millennium market revolution, Australian Marketing Institute.
- Innes, J. and Mitchell, F. (1991) Activity based costing: a review with case studies, Chartered Institute of Management Accountants (UK).
- Jaye, M. and Blayney, P. (1991). "Cost and management accounting practices in Australian manufacturing companies", Accounting Research Centre, The University of Sydney.
- Jensen, M and Meckling, W. (1976) "Theory of the firm: managerial behaviour, agency costs and ownership structure", *Journal of Financial Economics*, 3, 305-360.
- Johns, N. and Lee-Ross, D. (1998) Research methods in service industry management, Cassell.
- Johnson, R.S. (1993) Management processes for quality operations, ASQC Quality Press.
- Johnson, H. and Kaplan, R. (1987) Relevance lost-the rise and fall of management accounting, Harvard Business School Press.
- Jones, T.O. and Sasser, W.E. Jr. (1995) "Why satisfied customers defect", *Harvard Business Review*, 73, November-December, 88-99.

Joseph, W.B. (1996) "Internal marketing builds customer service quality", *Journal of Health Care Marketing*, 16(1), 54-60.

Kaiser, H. F. (1963) "Image analysis" in problems in measuring change, C. W. Harris, eds. University of Wisconsin Press.

Kaiser, H.F. and Rice, J. (1974) "Little Jiffy Mark IV", *Educational and Psychological Measurement*, 34, Spring, 111-117.

Kang, G.D., James, J. and Alexandris, K. (2002) "Measurement of internal service quality: application of the SERVQUAL battery to internal service quality", *Managing Service Quality*, 12(5), 278-291.

Kanji, G. K. and Asher, M. (1993) Total quality management Process: A Systematic Approach, Carfax.

Kaplan, R.S. and Norton, D. (2001) The strategy-focused organization: how balanced scorecard companies thrive in the new business environment, Harvard Business School Press.

Kaplan, TR.M. and Sacuzzo, D. P. (1993) Psychological testing: principles, applications and issues, third edition, Brooks Cole.

Kashyap, R. (2001) "The effects of service guarantees of external and internal markets", *Academy of Marketing Science Review*, 10.

Keaveney, S.M. (1995) "Customer switching behaviour in service industries: An exploratory study", *Journal of Marketing*, 59, April, 71-82.

Keegan, D.P. and Howard, P.D. (1988) "Focus on industry: making transfer pricing work for services", *Journal of Accountancy*, March, 165, 96-103.

Kelly, P. and Coaker, W. J. (1976) Can we generalize about criteria for industrial purchasing behaviour, American Marketing Educators' Proceedings, 330-33.

Kim, S.H. and Miller, S.W. (1979) "Constituents of the international transfer pricing decision, *Columbia Journal of World Business*, 14(1), Spring, 69-77.

Kim, J. and Mueller, C. W. (1978) Introduction to factor analysis: What it is and how to do it, Sage Publications.

Kirsch, R. J and Johnson, W. (1991) "The impact of fluctuating exchange rates on U.S. multinationals operating in the U.S.", *Journal of International Business Studies*, First Quarter, 41-54.

- Kleine, P. (1994) *An Easy guide to factor Analysis*, Routledge.
- Kortge, G. D. and Okongwo, P. A. (1993) "Perceived value approach to pricing", *Industrial Marketing Management*, May, 133-140.
- Kostecki, M. (1994) "Nouvelles tendances du marketing des services", *Revue Francaise du Marketing*, 149(4), 25-31.
- Kotler, P., Brown, L., Adam, S. and Armstrong, G. (2001) *Marketing, Fifth Edition*, Prentice Hall.
- Kvale, S. (1996) *Interviews: An introduction to qualitative research interviewing*, Sage.
- Lamb, Jr., C. W., Hair, J. F. and McDaniel, C. (1999) *Essentials of marketing*, South-Western College Publishing.
- Lambert, D. R. (1979) "Transfer pricing and inter-divisional conflict", *California Management Review*, summer, 21(4), 70-75.
- Langlois, R. N. and Robertson, P. R. (1995) *Firms, markets and economic change*, Routledge.
- Lapierre, J. (2000) "Customer – perceived value in industrial contexts", *Journal of Business and Industrial Marketing*, 15(2/3), 122-140.
- Larson, R. L. (1974) "Decentralization in Real Life", *Management Accounting*, 55 (9), 28-32.
- Lawrence, P. R. and Lorsch, J. W. (1967) *Organization and environment: managing differentiation and integration*, Irwin.
- Lee, J. Y. and Nefcy, P. (1997) "The anatomy of an effective HMO cost management system", *Management Accounting*, January, 49-54.
- Leisen, B. and Vance, C. (2001) "Cross-national assessment of service quality in the telecommunication industry: evidence from the USA and Germany", *Managing Service Quality*, 11(5), 301-317.
- Leszinski, R. and Marn, M. V. (1997) "Setting value, not price", *The McKinsey Quarterly*, No1, 99-115.

- Levin, I.P. and Johnson, R.D. (1984) "Estimating price-quality tradeoffs using comparative judgments", *Journal of Consumer Research*, 11, 593-600.
- Levitt, T. (1972) "Production line approach to service", *Harvard Business Review*, 50(5), 41-52.
- Lewis, B. L. (1993) "Service quality measurement", *Marketing Intelligence and Planning*, 11(4), 4-12.
- Lewis, B. L. and Gabrielsen, G. O. (1998) "Intra-organisation aspects of service quality management: the employees' perspective", *The Service Industries Journal*, 18(2), 64-90.
- Lichtenhal, J. D., Wildon, D. T., and Long, M. M. (1997). "Scientific contributions to the field from the Journal of Business-to-Business Marketing", *Journal of Business Research*, 83, 211-233.
- Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic inquiry*, Sage.
- Lings, I. A. (2000). "Internal marketing and supply chain management", *Journal of Services Marketing*, 14(1), 27-43.
- Lings, I. N. and Brooks, R.F. (1998) "Implementing and measuring the effectiveness of internal marketing", *Journal of Marketing Management*, 14, 325-51.
- Little, R. J. and Rubin, D. B. (1987) *Statistical analysis with missing data*, John Wiley and Sons.
- Little, R. J. and Schenker, N. (1995) *Missing Data in G. Arminger, C. C. Clogg and M. E. Sobel (Eds.), Handbook of statistical modeling for the social and behavioral sciences*, Plenum Press.
- Livesey, F. (1967) "The pricing of internal transfers", *The Accountant*, 157(4828), 99-104.
- Lovelock, C. (1996) *Services marketing*, Prentice-Hall.
- Lovelock, C. H. (1983) "Classifying services to gain strategic marketing insights", *Journal of Marketing*, 47(3), summer, 9-20.

Lovelock, C. H., Patterson, P. G. and Walker, R. H. (2001) *Services marketing: An Asia-Pacific Perspective*, Second edition, Pearson Education Australia.

Lovelock, C. H. and G. S. Yip, G. S. (1996) "Developing global strategies for service industries", *California Management Review*, 38 (2), winter, 64- 86.

Lucien, K. (1979) "Transfer pricing for the cost of funds in a commercial bank", *Management Accounting (NAA)*, January, 23-4, 36.

Lusch, R.F., Brown, S. W. And Brunswick, G. J. (1992) „A general framework for explaining internal vs. external exchange“, *Journal of the Academy of Marketing Science*, 20, 119-134.

Lynch, J. G. Jr. (1985) "Uniqueness issues in the decompositional modelling of multi-attribute overall evaluations: an information integration perspective", *Journal of Marketing Research*, XXII, February, 1-19.

Mackay, H. (1999) *Turning pint –Australians choosing their future*, Macmillan.

Madow, W. G., Olkin, I., Nisselson, H. and Rubin, D. B. (1983) *Incomplete data in sample surveys*, Academic Press.

Maher, M. (1982) *Management accounting literature: past, present and future*, paper presented at the American Accounting Association Meeting, San Diego, California.

Marn, M. V. and Rosiello, R. L. (1992) "Managing price, gaining profit", *Harvard Business Review*, 70, September-October, 84-94.

Marshall, G. W., Baker, J., and Finn, D. W. (1998) "Exploring internal customer service quality", *Journal of Business and Industrial Marketing*, 13, 4/5, 381-392).

Mathur, S.S. (1992) "Talking straight about competitive strategy", *Journal of Marketing Management*, 8, 199-217.

Matthyssens, P. and Vandenbempt, K. (1998) "Creating competitive advantage in industrial services", *Journal of Business and Industrial Marketing*, 13(4/5), 339-355.

- McAulay, L. and Tomkins, C.R. (1992) "A review of the contemporary transfer pricing literature with recommendations for future research", *British Journal of Management*, 3, 101-122.
- McCarthy, D. G. (1997) *The loyalty link: how employees create loyal customers*, John Wiley and Sons.
- McColl-Kennedy, J. (2003) *Services marketing*, John Wiley & Sons Australia.
- McColl, G. I. And Simmons, J. L. (1969) *Issues in participant observation*, Addison-Wesley.
- McDougall, G. H. and Levesque, T. (2000) "Customer satisfaction with services: putting perceived value into equation", *Journal of Services Marketing*, 14(5), 392-410.
- McDougall, G. H. and Snetsinger, D. W. (1990) "The intangibility of service measurement and competitive perspectives", *The Journal of Services Marketing*, 4, Fall, 27-40.
- McKinsey and Company (2005) *Pricing Benchmark Survey*.
- McNair, C. J., Polutnik, L. and Silvi, R. (2001) "Customer value: a new kind of cost management", *The Journal of Corporate Accounting & Finance*, March/April, 9-14.
- Meer-Kooistra, V.D. (1994) "The coordination of internal transactions: the functioning of transfer pricing systems in the organisational context", *Management Accounting Research*, 5(2), June, 123-152.
- Mehafdi, M. and Emmanuel, C. (1997) *Convergence divergence in transfer pricing research: a forty-year survey*, Working Paper 97/9, Department of Accounting and Finance, University of Glasgow.
- Mills, R. W. (1988) "Pricing decisions in UK manufacturing and service companies", *Management Accounting*, November, 38-39.
- Mehafdi, M. (1990). "Behavioural aspects of transfer pricing in U.K. decentralised companies" unpublished Ph.D. dissertation, Thames Polytechnic.

Mehafdi, M. and Emmanuel, C. (1997) Convergence, divergence in transfer pricing research: a forty year survey, Working Paper 97/9, Department of Accounting and Finance, University of Glasgow.

Mellon, C. (1990) Naturalistic inquiry for library science: methods and applications for research, evaluations and reading, Greenwood Press.

Miles, M.B. (1979) Qualitative data as an attractive nuisance: The problem of analysis, *Administrative Science Quarterly*, 24(4), 590-601.

Miles, M. B. and Huberman, M. A. (1994) Qualitative data analysis, Second Edition, Sage Publications.

Mills, P. K. and Ungson, G. R. (2001) "Internal market structures: substitutes for hierarchies", *Journal of Service Research*, February, 3(3), 252-265.

Mills, R. W. and Sweeting, C. (1988) Pricing decisions in Practice, CIMA.

Mohr, L.A. and Bitner, M. J. (1995) "The role of employee effort in satisfaction with service transactions", *Journal of Business Research*, 32, 239-522.

Monroe, K. B. (1990) Pricing: making profitable decisions, Second Edition, McGraw-Hill.

Monroe, K.B. and Cox, J. L. (2001) "Pricing practices that endanger profits", *Marketing Management*, September/October, 10(3), 42-47.

Monroe, K.B. and Krishnan, R. (1985) "The effect of price on subjective product evaluations", in Jacoby, J. and Olson, J. (Eds), *Perceived Quality: how consumers view stores and merchandise*, Lexington Books.

Morris, M. H. (1987) "Separate prices as a marketing tool", *Industrial Marketing Management*, 16, 79-86.

Morris, M. H. and Calantone, R. J. (1990) "Four components of effective pricing", *Industrial Marketing Management*, 19, 321-329.

Morris, M. H. and Fuller, D. A. (1989) "Pricing an industrial service", *Industrial Marketing Management*, 18, 139-146.

Morrow, M. (1992) Activity-based management, Woodhead-Faulkner.

- Mostafa, A.M. (1982) in Howard, K., Mostafa, A.M. and Sharp, J.A. (1982) "Current issues in transfer pricing", *Managerial Finance*, 8(3-4), 1-36.
- Mueller, G. G, Gernon, H., and Meek, G. (1997) Accounting: an international perspective, 4th edition, Irwin.
- Nagel, P.J. and Cilliers, W.W. (1990) "Customer satisfaction: a comprehensive approach", *International Journal of Physical Distribution and Logistics*, 20,6, 2-46.
- Nagle, T.T. and Cressman, G.E. (2002) "Don't just set prices, manage them", *Marketing Management*, 11(6), 29-34.
- Nagle, T. T. and Holden, R. K. (1995) The strategy and tactics of pricing – a guide to profitable decision-making, 2nd Edition, Prentice-Hall.
- Naumann, E. 1995. Creating customer value, Thompson Executive Press.
- Neimark, M. (1992) The hidden dimensions of annual reports: sixty years of social conflict at General Motors, Markus Wiener.
- Nicholls, J.A., Gilbert, G.R., and Roslow, S. (1998) "Measuring customer satisfaction with personal service and the service setting", *Journal of Consumer Marketing*, 15(3), 239-253.
- Noble, P.M. and Gruca, T.S. (1999) "Industrial pricing: theory and managerial practice", *Marketing Science*, 18(3), 435-452.
- Norman, G. R. and Streiner, D. L. (1994) Biostatistics: the bare essentials, Mosby.
- Normann, R. (1970) A personal quest for methodology, Scandinavian Institute for Administrative Research.
- Nunnally, J. (1988). Psychometric theory. New York: McGraw-Hill.
- Oakland, J.S. (1993) Total quality management, second edition, Butterworth-Heinemann.
- Olhavsky, R.W. (1985) "Perceived quality in consumer decision making: an integrated theoretical perspective", in Jacoby, J. and Olson, J. (Eds) Perceived Quality, Lexington Books.

Oliver, R. L. 1993. A conceptual model of service quality and service satisfaction: compatible goals, different concepts", Swartz, T., Bowen, D.E., Brown, S.W. *Advances in Services Marketing and Management: Research and Practice*, 2, 65-85.

Oliver, R. L. (1996) "Satisfaction: a behavioural perspective on the customer", McGraw-Hill.

Onkvist, S. and Shaw, J. J. (1987) "The measurement of service value: some methodological issues and models", in Suprenant, C. (Eds) *Add value to your service*, 6th Annual Services Marketing Proceedings, American Marketing Association.

Otley, D. T. 1980. The Contingency Theory of Management Accounting: Achievement and Prognosis", *Accounting, Organizations and Society*, 5, pp. 413-428.

Otley, D. (1994) "Management control in contemporary organizations: towards a wider framework", *Management Accounting Research*, 5, 289-299.

Owens, R. W. (1982) "Pricing internal transfers", *Internal Auditor*, August, 14-17.

Parasuraman, A. (1997) "Reflections on gaining competitive advantage through customer value", *Journal of the Academy of Marketing Science*, Volume 25, No. 2, pp. 154-161.

Parasuraman, A., Zeithaml, V. A. and Berry, L. B. (1985). "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, 49, Fall, 41-50.

Parasuraman, A., Zeithaml, V. and Berry, L.L. (1988) "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality", *Journal of Retailing*, 64, Spring, 12-40.

Parish, R. J. (1995) "Service level agreements as a contributor to TQM goals", *Logistics Information Management*, 10(6).

Patton, M.Q. (1990) *Qualitative evaluation and research methods*, Sage.

Payne, A., Holt, S. and Frow, P. (2000) "Integrating employee, customer and shareholder value through an enterprise performance model: an opportunity for financial services", *The International Journal of Bank Marketing*, 18(6), 258-273.

Pearce, J. and Robinson, R. (1997) *Strategic management: formulation, implementation and control*, Irwin McGraw-Hill.

Perera, J., McKinnon, J. and Harrison, G. L. (2003) "Diffusion of transfer pricing innovation – a longitudinal case study of a government trading enterprise, *Management Accounting Research*, 14, 140-164.

Persen, W. and Lessig, V. (1979) *Evaluating the financial performance of overseas operations*, Financial Research Foundation (USA).

Peter, J. P. (1979) "Reliability: a review of psychometric basics and recent marketing practices, *Journal of Marketing Research*, XVI, February, 6-17.

Peter, P. and Olson, J. (1983) "Is science marketing?", *Journal of Marketing*, 47, Fall, 111-125.

Peteraf, M. (1993) At the cornerstones of competitive advantage: a resource-based view, *Strategic Management Journal*, 14, 179-191.

Peterson, R.A. and Wilson, W. R. (1985). Perceived risk and price-reliance schema as price-perceived quality mediators", in Jacoby, J., and Olson, J. (Eds) *Perceived Quality*, Lexington Books.

Pfau, B. D., Dentzal, A. and Geller, A. (1991) „Satisfy your internal customers“, *Journal of Business Strategy*, 12(6), 9-13.

Phillips, L. W. (1981) "Assessing measurement error in key informant reports: a methodological note on organizational analysis in marketing", *Journal of Marketing Research*, 18, 395-415.

Phillips, B. J. (1997) Thinking into it: Consumer interpretations of complex advertising images, *Journal of Advertising*, 16(2), 77-87.

Piercy, N. F. (1992) *Market-led strategic change*, Butterworth –Heinemann.

Piercy, N. F. (1995) "Customer satisfaction and the internal market", *Journal of Applied Marketing Science*, 1, 22-44.

Piercy, N.F. and Morgan, N.A. (1991) "The impact of lean thinking and the lean enterprise on marketing: threat or synergy?", *Journal of Marketing Management*, 12, 679-693.

Pinchot, G. and Pinchot, E. (1993) *The end of bureaucracy and the rise of the intelligent organization*, Berrett-Koehler.

Piper, A. G. (1969) "Internal trading", *Accountancy*, 80(910), October, 733-736.

Pondy, L.R. (1967) "Organizational conflict: concepts and models", *Administrative Science Quarterly*, 12, September, 296-320.

Popay, J., Rogers, A. and Williams, G. (1998) Rationale and standards for the systematic review of qualitative literature in health services research, *Qualitative Health Research*, 8(3), 341-351.

Porter, M. E. (1980) *Competitive strategy*, The Free press.

Porter, M. E. (1985) *Competitive advantage*, The Free Press.

Porter, M.E. and Millar, V. E. (1985) "How information gives you competitive advantage", *Harvard Business Review*, 68(July-August), 149-160.

Porter, M. E. (1996) "What is strategy?", *Harvard Business Review*, 44, November-December, 61-78.

Pralahad, C. K. and Hamel, G. 1990. "The core competence of the corporation", *Harvard Business Review*, May-June.

Price Waterhouse (1984) *Transfer pricing practices of American industry*, Price Waterhouse.

Pride, W. M. and Ferrell, O.C. (2000) *Marketing concepts and strategies*, Houghton Mifflin.

Quester, P. G. and Kelly, A. (1999) "Internal marketing practices in the Australian financial sector: an exploratory study", *Journal of Applied Management Studies*, 8(2), 217-229.

- Quester, P. and Romaniuk, S. (1997) "Service quality in the Australian advertising industry: a methodological study", *Journal of Services Marketing*, 11(3), 180-192.
- Quinn, J. B. (1999) "Strategic outsourcing: leveraging knowledge capabilities", *Sloan Management Review*, summer, 21.
- Quinn, J. B. and Hilmer, F.G. (1994) Strategic outsourcing, *Sloan Management Review*, Summer, 43-55.
- Radebaugh, L and Gray, S. J. (1997) International accounting and multinational enterprises, Fourth edition, John Wiley.
- Rafiq, M. and Ahmed, P. (1993) "The scope of internal marketing: defining the boundary between marketing and human resource management", *Journal of Marketing Management*, 9(3), 219-232.
- Raimond, P. (1993) Management projects: design, research and presentation, Chapman & Hall.
- Ravald, A. and Gronroos, C. (1996) "The value concept and relationship marketing", *European Journal of Marketing*, 30(2), 21-30.
- Reichheld, F. F. (1996) The loyalty effect: The hidden force behind growth, profits and lasting value, Harvard Business School Press.
- Reichheld, F.F. and Sasser, W.E. Jr. (1990) "Zero defections: quality comes to services", *Harvard Business Review*, September-October, 105-11.
- Reymont, R. and Joreskog, K. G. (1983) Applied factor Analysis in natural Sciences, Cambridge University Press.
- Reynoso, J. and Moores, B. (1995) "Towards the measurement of internal service quality", *International Journal of Service Industry Management*, 6(3), 64-83.
- Richards, T. J. and Richards, L. (1991) Computing in qualitative analysis: a healthy development, *Qualitative Health Research*, 1(2), 234-262.

Rook, A. (1971) "Transfer pricing: A measure of management performance in multi-divisional companies", Management Survey report No.8, *British Institute of Management*.

Ruekert, R.W. and Churchill, G. A. Jr. (1984) "reliability and validity of alternative measures of channel member satisfaction", *Journal of Marketing Research*, XXI, May, 226-33.

Rust, R. T., Zeithaml, V. And Lemon, K. N. (2004) Driving customer equity: how customer lifetime value is reshaping corporate strategy, the Free Press.

Ryan, B., Scapens, R.W. and Theobald, M. (1992) Research method and methodology in finance and accounting", Academic Press.

Sahay, S.A. (2003) "Transfer pricing based on actual cost", *Journal of Management Accounting Research*, 15, 177- 192.

Samli, A.C. and Jacobs, L. (1994) "Pricing practices of American multinational firms: standardization vs. localization dichotomy", *Journal of Global Marketing*, 8(2), 51- 73.

Sasser, W.E. (1976) "Match supply and demand in service industries", *Harvard Business Review*, November-December, 54(3), 133-40.

Scapens, R. W. (1990) "Researching management accounting practice: the role of case study methods", *British Accounting Review*, 22, pp. 259-281.

Schlesinger, L.A. and Heskett, J. L. (1991) „The service-driven service company", *Harvard Business Review*, September-October, 71-81.

Schmidt, L. (2002) "The pricing gap", *Business Review Weekly*, September 19-25, 46.

Schnaars, P. (1991) Marketing strategy: a customer-driven approach, The Free Press.

Schneider, B. and Bowen, D. E. (1985)"Employee and customer perceptions of service in banks: replication and extension", *Journal of Applied Psychology*, 70(3), p. 423-33.

Schober, M. F. and Conrad, F. G. (1997) "Conversational interviewing", *Public Opinion Quarterly*, 61(4), 576-602.

- Schumacher, R. E. and Lomax, R. G. (1996) A beginner's guide to structural equation modeling, Lawrence Erlbaum Associates.
- Schwab, D. P. (1980) "Construct validity in organizational behaviour", *Research in Organizational Behaviour*, 2, 3-43.
- Sekaran, U. (2003) Research methods for Business: A skill building approach, Fourth Edition, Wiley.
- Shank, J. and Govindarajan, C. (1992) "Strategic cost management: the value chain perspective", *Journal of Management Accounting Research*, fall, 179-198.
- Shapiro, B. and Jackson, B. (1978) "Industrial pricing to meet customers' needs", *Harvard Business Review*, 56(6), 119-127.
- Sharma, V.S. (1992) "Determining product profitability", *Bankers Magazine*, March-April, 67-71.
- Shim, E. and Sudit, E. (1995) "How manufacturers price products", *Management Accounting (UK)*, February, 37-39.
- Shostack, G. L. (1977) "Breaking free from product marketing", *Journal of Marketing*, 41(2), April, 73-80.
- Simon, H. (1992) "Pricing opportunities and how to exploit them", *Sloan Management Review*, Winter, 55-65.
- Simpson, P.M., Siquaw, J. A. and White, S. C. (2002) "Measuring the performance of suppliers: An analysis of evaluation processes", *Journal of Supply Chain Management*, winter, 38(1), 29-42.
- Sinha, I. and DeSarbo, W. S. 1998. „An integrated approach toward spatial modeling of perceived customer value“, *Journal of Marketing Research*, 35, 236-249.
- Slater, S. F. and Narver, J. C. (1998) "Customer-led and market-oriented " Let's not confuse the two, *Strategic Management Journal*, 19(10), 1001-1006.
- Shoemaker, P. J. (1990) Strategy, complexity and economic rent, *Management Science*, 36(10), 1178-1192.

- Shostack, G. L. (1977) "Breaking free from product marketing", *Journal of Marketing*, 51, January, 34-43.
- Simon, H. (1992) "Pricing opportunities and how to exploit them", *Sloan Management Review*, Winter, 55-65.
- Slater, S. F. (1997) "Developing a customer value-based theory of the firm", *Journal of the Academy of Marketing Science*, Vol. 25, No. 2, 162-167.
- Smith, G. E. and Nagle, T. T. (1994) "Financial analysis for profit driven pricing", - *Sloan Management Review*, 35, Spring, 71-84.
- Smith, G.E. and Nagle, T. T. (2002) "How much are customers willing to pay?", *Marketing Research*, Winter, 14(4), 20-26.
- Sommers, M. (1999) "getting the customer into the boardroom", *Marketing Business*, 28-31.
- Spicer, B. H. (1988) "Towards and organizational theory of the transfer pricing process", *Accounting, Organizations and Society*, 13, 302-322.
- Spiggle, S. (1994) Analysis and Interpretation of Qualitative Data in Consumer Research, *Journal of Consumer Research*, 21(3), 491-503.
- Spreng, R.A., MacKenzie, S. B. And Olhavsky, R. W. (1996) "A reexamination of the determinants of customer satisfaction", *Journal of Marketing*, 60(3), 15-32.
- Stabell, C. B. and Fjelstad, O. D. (1998) „Configuring value for competitive advantage: On chains, shops and networks“, *Strategic Management Journal*, 19, 413-437.
- Stafford, M. R., Stafford, T. F. and Wells, B. P. (1998) "Determinants of service quality and satisfaction in the auto casualty claims process", *Journal of Services Marketing*, 12(6), 426-440.
- Stahl, M. J., Barnes, W. K., Gardial, S. F., Parr, W. C. and Woodruff, R. B. (1999) "Customer value analysis helps hone strategy", *Quality Progress*, 32(4), 53-58.
- Stauss, B. 1995. "Internal services: classification and quality management: An assessment of a reassessment", *Journal of Service Industry Management*, 6(2), 62-78.

- Stern, P. N. (1994) "Eroding grounded theory" in Morse, J. M (ed.) *Qualitative Research Methods*, Sage, 213-23.
- Stewart, D. W. (1981) "The application and misapplication of factor analysis in marketing research", *Journal of Marketing Research*, XVIII, February, 51-62.
- Strauss, A. and Corbin, J. (1990) *Basics of qualitative research: grounded theory procedures and techniques*, Sage.
- Sun Microsystems Inc. (2002) *Implementing effective chargeback policies*", White Paper.
- Sureshchandar, G.S., Rajendran, C. and Anantharaman, R. N. (2002) "Determinants of customer-perceived service quality: a confirmatory factor analysis approach", *Journal of Services Marketing*, 16(1), 9-34.
- Sweeney, J. C. and Soutar, G. N. (2001) "Consumer perceived value: the development of a multiple item scale", *Journal of Retailing*, 77(2), summer, 203-220.
- Sweeney, J. J., Soutar, G. N. and Johnson, L. W. (1999) "The role of perceived risk in the quality – value relationship: a study in retail environment", *Journal of Retailing*, 75(1), 77-105.
- Swieringa, R.J. and Waterhouse, J. H. (1982) "Organizational views of transfer pricing", *Accounting, Organizations and Society*, 7(2), 149-165.
- Tang, R.Y. (1979) *Transfer pricing practices in the USA and Japan*, Praeger.
- Tang, R. Y. (1992) "Transfer pricing in the 1990s", *Management Accounting*, 73 (8), February, 22-26.
- Tang, R. Y., Walter, C. K. and Raymond, R. H. (1979) "Transfer pricing- Japanese vs. American Style", *Management Accounting*, 60 (7), January, 14.
- Taylor, S. (1994) "Waiting for service: The relationship between delays and evaluations of service", *Journal of Marketing*, 58(2), 56-69.
- Temple, R. E. and Droege, R. W. (1994) "Internal customers need delighting too", *Managing Service Quality*, 4(1), 14-17.

Tesch, R. (1991) Software for qualitative researchers: analysis needs and program capabilities. In N.G. Fielding and R. M. Lee (Eds.) Using computers in qualitative research, 16-37, Sage.

Tewes, J. A. (1976) "Valuing bank funds for allocation and pricing decisions", *Management Accounting* (NAA), November, 27-33.

Thaler, R. (1985) "Mental accounting and consumer choice", *Marketing Science*, 4(3), Summer, 199-214.

Thomas, A. L. (1980) A behavioural analysis of joint-cost allocation and transfer pricing, Stipes.

Thompson, A. A., Strickland, A. J. and Gamble, J. E. (2005) Crafting and executing strategy: the quest for competitive advantage, 14th edition, McGraw-Hill.

Thwaites, D., Walley, K. and Foots, S. (1996) "Systematic management of differential advantage: a case study from the chemical industry", *Industrial Marketing Management*, 25, 209-222.

Tomkins, C. (1973) Financial planning in divisionalised companies, Hay Market Publishing.

Tomkins, C. and McAulay (1992) "Modelling fair transfer prices where no market guidelines exist", in *Management Accounting Handbook* by Colin Drury, Butterworth-Heinemann, 303-326.

Tung, W., Capella, L.M. and Tat, P. K. (1997) "Service pricing: A multi-step synthetic approach", *Journal of Services Marketing*, 11(1), 53-65.

Turner, B.A. (1983) Some practical aspects of qualitative data analysis: one way of organizing the cognitive processes associated with the generation of grounded theory, quality and quantity, 15(3), 225-247.

Tyler, W. H. and Fridholm, R. (1975) Internal transfer price of bank funds, Burroughs Clearing House, March, 18-19, 56, 58-59.

Uлага, W. (2001) "Customer value in business markets: An agenda for inquiry", *Industrial Marketing Management*, 30, 315-319.

Useem, M. and Harder, J. (2000) "Leading laterally in company outsourcing", *Sloan Management Review*, winter, 41(2), 25.

Vancil, R. F. (1979) Decentralization: managerial ambiguity by design, Dow Jones-Irwin.

Varey, R. J. (1995) "Internal marketing: a review and some interdisciplinary research challenges", *International Journal of Service Industry Management*, 6(1), 40-63.

Venkatraman, N. (1989) "Strategic orientation of business enterprises: the construct, dimensionality and measurement", *Management Science*, 35(8), 942-962.

Walker, G. (1988) "Strategic sourcing, vertical integration and transaction costs, *Interfaces*, May-June, 62-73.

Walton, R.E. and Dutton, J. M. (1969) "The management of interdepartmental conflict: a model and review", *Administrative Science Quarterly*, 14, December, 522-542.

Ward, K. (1993) Financial management for service companies, Pitman Publishing.

Wason, P. J. and Johnson-Laird, P.N. (1972) Psychology of reasoning: structure and content, B. T. Batsford.

Watson, D. J. and Baumler, J. V. (1975) "Transfer pricing: a behavioural context", *The Accounting Review*, 50, 466-474.

Welch, J.A. and Nayak, P.R. (1992) "Strategic sourcing: a progressive approach to the make or buy decision", *Academy of Management Executive*, 23-31.

Wernerfelt, B. (1984) "A resource-based view of the firm", *Strategic Management Journal*, 5(2), 413-430.

West, T.D. and West, D.A. (1997) "Applying ABC to health care", *Management Accounting*, February, 22-33.

Wetenhall, P. (2003) "Putting the retail back into retail", *Journal of Banking and Financial Services*.

Whyte, W. F. (1943) Street corner society, University of Chicago Press.

- Wiele, T.V.D., Boselie, P. and Hesselink (2002) "Empirical evidence for the relationship between customer satisfaction and business performance", *Managing Service Quality*, 12(3), 184-193.
- Wikstrom, S. and Normann, R. (1994) Knowledge and value, Routledge.
- Wilkie, W. L. (1990) Consumer behaviour, Second Edition, John Wiley.
- Williamson, O. E. (1985) The economic institutions of capitalism: firms, markets and rational contracting, The Free Press.
- Williamson, O. E. (1993) "Transaction cost economics and organizational theory", *Industrial and Corporate Change*, 2, 107-156.
- Wilson, E. J. (1994) "The relative importance of supplier selection criteria: A review and update", *International Journal of Purchasing and Materials and Management*, 30(3), summer, 35-42.
- Wiseman, F. and Billington, M. (1984) "Comment on a standard definition of response rates", *Journal of Marketing Research*, XXI, August, 336-8.
- Wisner, J. D. and Stanley, L. L. (1999) "Internal relationships and activities associated with high levels of purchasing service quality", *Journal of Supply Chain Management*, 35(3), 24-32.
- Woodruff, R.B. (1997) "Customer value: the next source of competitive advantage", *Journal of the Academy of Marketing Science*, 25(2), 139-153.
- Woodruff, R.B. and Gardial, S. (1996) "Know your customer: new approaches to understanding customer value and satisfaction, Blackwell.
- Wu, F. H. and Sharp, D. (1979) "An empirical study of transfer pricing", *The International Journal of Accounting Education and Research*, spring, 71-99.
- Wyner, G.A. (2005) "The many faces of customer value", *Marketing Research*, 10(1), Spring, 34-36.
- Young, J. A. and Varble, D. L. (1997) "Purchasing's performance as seen by its internal customers: a study in a service organization", *International Journal of Purchasing and Materials Management*, 33(3), 36-41.

Yunker, P. J. (1982) "A survey study of subsidiary autonomy, performance evaluation and transfer pricing in multinational corporations", *Columbia Journal of World Business*, (18), Fall, 51-64.

Zaman, M. (1992) 'Transfer pricing practices by multinationals – some evidence from Australia', Working Paper No.12, University of Western Sydney Publications.

Zeithaml, V. (1988) "Consumer perception of price, quality and value: a means-end model and synthesis of evidence", *Journal of Marketing*, 52, July, 2-22.

Zeithaml, V. A. and Bitner, M. J. (2000) *Services marketing: integrating customer focus across the firm*, 2nd edition, McGraw-Hill.

Zeithaml, V.A. and Bitner, M. H. (2003) *Services marketing: Integrating customer focus across the firm*, Third Edition, McGraw-Hill.

Zeithaml, V. A. and Parasuraman, A. and Berry, L. L. (1985) "Problems and strategies in services marketing", *Journal of Marketing*, spring, 49, 33-46.

Zeithaml, V. A., Berry, L. L. and Parasuraman, A. (1996) "The behavioral consequences of service quality", *Journal of Marketing*, 60(2), 31-46.

Zeithaml, V. A., Parasuraman, A. and Berry, L.L. (1990) *Delivering Quality Service*, The Free Press.

Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1990) *Delivering Quality Service*, The Free Press.

Zemke, R. and Zemke, S. (1994) „Partnering: A new slant on serving the internal customer“, *Training*, 31(10), 37-43.

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APPENDIX 1

INTRODUCTORY LETTERS

APPENDIX 1A – Introductory letter / interview

APPENDIX 1B – Introductory letter / Questionnaire

APPENDIX 1A– Introductory letter / Interview

Written on RMIT letterhead

Dear

I am currently a PhD student in the School of Accounting and Law at RMIT Business. My thesis topic is “ Gaining Competitive Advantage Through Internal Pricing: A Value Chain Framework”.

The project aims to ascertain the nature of the relationship between internal pricing of services and acquiring and sustaining a set of skills and resources that enable a firm to enjoy a superior position relative to its competitors (competitive advantage). The purpose of this research is to investigate the manner in which value for division (s) is generated in performing internal activities, and how the value generated translates into competitive advantage.

I would like to invite you to participate in this research. The participation is voluntary and you may withdraw at any time. Should you participate, the data collection will involve interviews with corporate management (duration is approximately 45 minutes) and interviews and surveys at the divisional level with staff who are actually involved in internal transfers.

Your anonymity and confidentiality will be assured in this research. No individual responses will be identified, and results will be published in aggregate form only. Information which will ultimately be used for publication will be available for your review.

If you have any queries regarding this project please contact my supervisors (Professor Robert Clift –telephone 9 925 5726 or Robert Inglis (9 925 5715) or Professor Robert Brooks, the Dean of the RMIT Research and Innovation Unit - phone 9 925 5595, email rdu.rmit@edu.au.

Yours sincerely

Bülend Terzioglu

APPENDIX 1 B- Introductory letter / Questionnaire

Written on RMIT letterhead

Attention:

Dear Sir,

I am currently a PhD student in the School of Accounting and Law at RMIT Business. My thesis topic is “**Gaining Competitive Advantage Through Internal Pricing: A Value Chain Framework**” where internal pricing is examined for service products. Surprisingly, the impact of internal pricing on an organisation’s competitive advantage has never been researched before, making this study unique and novel.

In order to complete my research, I am undertaking a survey aimed at two different groups within service oriented companies, those in general / strategic management and operational managers at the divisional level. Enclosed are two questionnaires headed “Corporate” and “Division”. The Corporate questionnaire contains questions of a more general or strategic nature and would best be completed by an executive at corporate level (including the Chief Financial Officer); the Division questionnaire contains more specific questions which can best be answered by a manager at the operational level. I would be very grateful if you could assist me in completing this original research by forwarding these questionnaires to those staff who, in your opinion, are appropriate.

The questionnaire takes about 10 minutes to complete. Participation in this research is voluntary and you may withdraw at anytime. RMIT University assures the anonymity of participants and confidentiality of any information provided. No individual responses will be identified and results will be published in aggregate form only. Information which will ultimately be used for publication will be available for your review. In recognition of the effort I am asking of you, I would be happy to share the aggregate results of this research with you within the constraints of non disclosure of confidential information.

If you have any queries regarding this project please contact my supervisors (Professor Robert Clift -telephone (03) 9 925 5726 or Robert Inglis –telephone 9 925 5715 or the Chair of the Business Portfolio Human Research Ethics Sub-committee, telephone (03) 9925 5594, fax (03) 9925 5595, email: rdu@rmit.edu.au).

I hope that you can help me and wish to thank you in advance for your time and consideration. I look forward to receiving the completed questionnaires.

Sincerely

Bulend Terzioglu

Encl. Four-page questionnaire and a self-addressed prepaid envelope

APPENDIX 2

FOLLOW-UP LETTER

APPENDIX 2A – Follow-up letter / interview

APPENDIX 2B – Follow-up letter / Questionnaire

APPENDIX 2A – Follow-up letter / Interview

Written on RMIT letterhead

Melbourne,

Dear

Reference is made to my earlier communication (a copy of which is attached) inviting you to participate in the research project entitled “***Gaining Competitive Advantage Through Internal Pricing: A Value Chain Framework***”.

Should you agree to participate in this research program, RMIT University will assure your anonymity and confidentiality. In recognition of the effort I am asking of you, I would be happy to share the aggregate results of this research with you within the constraints of non disclosure of confidential information.

I trust findings of this study will prove to be fruitful for your organization. I am conscious of your time constraints. Therefore, I will ensure that meetings are conducted strictly within the agreed time limits. Interviews will be scheduled in the months of March, April and May 2005.

To explore the possible participation of your organisation in this study, I would be happy to clarify any questions you might have relating to this research either on the phone or at a meeting prior to the interview.

I thank you for your consideration and look forward to your response by email (bulend.terzioglu@jcu.edu.au OR bterz@prodigyvisions.com) if I might call you or your representative to arrange a meeting.

Sincerely

Enclosed: Previous correspondence

APPENDIX 2B – Follow-up letter / Questionnaires

Written on RMIT letterhead

Melbourne

Attention

Dear

Reference is made to my earlier communication inviting you to participate in the research project entitled “**Gaining Competitive Advantage Through Internal Pricing: A Value Chain Framework**”. In the event that you have not for one reason or another, returned the questionnaire, I am enclosing a second copy of it along with a self-addressed post-paid envelope.

In order to complete my research, I am undertaking a survey aimed at two different groups within service oriented companies, those in general / strategic management and operational managers at the divisional level. Enclosed are two questionnaires headed “Corporate” and “Division”. The Corporate questionnaire contains questions of a more general or strategic nature and would best be completed by an executive at corporate level (including the Chief Financial Officer); the Division questionnaire contains more specific questions which can best be answered by a manager at the operational level. I would be very grateful if you could assist me in completing this original research by forwarding these questionnaires to those staff who, in your opinion, are appropriate.

Should you agree to participate in this research program, RMIT University will assure your anonymity and confidentiality. In recognition of the effort I am asking of you, I would be happy to share the aggregate results of this research with you within the constraints of non disclosure of confidential information. I trust findings of this study will prove to be fruitful for your organization.

I hope that you can help me and wish to thank you in advance for your time and consideration. I look forward to receiving the completed questionnaires.

Sincerely

Bulend Terzioglu

Enclosed: Questionnaires and self-addressed pre-paid envelope

APPENDIX 3

QUESTIONNAIRES

APPENDIX 3A	Questionnaire / Corporate
APPENDIX 3A1	Source - motivation for questionnaire questions / Corporate
APPENDIX 3B	Questionnaire / Division
APPENDIX 3B1	Source - motivation for questionnaire questions / Division



QUESTIONNAIRE ON INTERNAL PRICING AND VALUE CHAIN

1. Organisation

1.1. Which of the following industries best describes your firm's business? Please tick the appropriate box.

- ☐ Accommodation, cafes & restaurants
- ☐ Communication services
- ☐ Construction
- ☐ Cultural and recreation
- ☐ Electricity, gas and water supply
- ☐ Finance and insurance
- ☐ Health and community services
- ☐ Personal and other
- ☐ Property and business services (i.e. technical, computer, legal & accounting, marketing & business management)
- ☐ Transportation and storage
- ☐ Other service. If other, what type of business?

1.2. What is the total number of employees in your organisation? Please tick the appropriate column.

Number of employees	In Australia	Worldwide
1-20		
21-200		
201-500		
More than 500		

1.3. What is the sales volume of your organisation in Australia (in AUD) ?

- ☐ less than 20 m ☐ 20 – less than 40m ☐ 40 –less than 80 m ☐ more than 80 m

- 1.4. Which of the following best describes your organisational structure?
(Please see footnotes for definitions)
- ☐ Matrix¹ ☐ Functional² ☐ Business unit³
- 1.5. How is your firm organised with respect to responsibility centres? You may tick more than one box.
- ☐ Cost centre ☐ Profit centre
☐ Revenue centre ☐ Investment centre
- 1.6. Are you subsidiary of a foreign company?
- ☐ Yes ☐ No
- 1.7. If your answer to 1.6. is 'yes', where is the headquarters of your parent company?
- ☐ USA ☐ UK ☐ Other. Please specify.
☐ France ☐ Germany
- 1.8. Are divisions (responsibility centres) evaluated based on divisional results or corporate results?
- ☐ Divisional results ☐ Corporate results ☐ Other. Please specify briefly.
- 2. Internal pricing methods**
- 2.1. Who, generally, is responsible for setting internal (transfer) prices?
- ☐ Headquarters alone
☐ Divisional level alone
☐ Headquarters and divisional management together
- 2.2. In your organisation, what is the influence of the role played by Chief Financial Officer in setting transfer prices?
- ☐ Very important
☐ Quite important
☐ Neither important nor unimportant
☐ Of little importance
☐ Not important

¹ **Matrix Organisation:** organizations in which functional units have dual responsibilities. These organizations are flat and decentralized. Employees inside a matrix organization have two bosses: a functional boss who is the head of a function and a product or project boss who is responsible for managing the individual projects.

² **Functional organization:** Is multi-divisional where each manager is responsible for a specified function, such as marketing, production and accounting. Most divisions are cost centres except for a single sales force that acts as a revenue centre. Divisions cooperate but do not compete with each other.

³ **Business Unit:** Each business unit manager is responsible for most of the activities of the unit which is a semi-independent part of the company.

2.3. **Generally, how often are the transfer pricing decisions reviewed?**

☐ Annually ☐ Semi-annually ☐ Other (please specify)

2.4. **What circumstances prompt a change in transfer price / method?**

- ☐ Changes in organisational structure
 - ☐ Strategic nature of inter-divisional trade
 - ☐ Changes in the degree of transaction specific investment
 - ☐ Changes in market conditions
 - ☐ Other. Please specify.
-

2.5. **In your opinion, relatively how important are each of the following objectives in your transfer pricing system?** Please tick one box in each row.

	1 Very important	2 Quite Important	3 Neither important nor unimportant	4 Of little importance	5 Not important
Ease of understanding					
Evaluation of divisional profits					
Goal congruence- managers making decisions that are in the best interests of the <i>total</i> organization					
Managerial motivations					
Optimal pricing decisions					
Greater divisional autonomy					
Other. Please specify					

2.6. **For those objectives rated as important, how do you determine if the desired objectives in the transfer pricing system have been achieved?**

- ☐ There are formal procedures designed for this purpose
 - ☐ There are no formal procedures
 - ☐ Through intuition
 - ☐ We do not believe it is significant to explore this relationship
 - ☐ Other. Please specify
-

2.7. From the point of view of the company, how often is each of the following transfer pricing method utilised for internal transactions? Please tick (✓).

	1 Always used	2 Frequently used	3 Sometimes used	4 Rarely used	5 Never used
A. COST-BASED					
A.1. Variable cost at standard					
A.2. Variable cost at actual					
A.3. Variable cost plus					
A.4. Full cost at standard					
A.5. Full cost at actual					
A.6. Full cost plus					
B. MARKET BASED					
B.1. Market-based (current)					
B.2. Market-based (adjusted)					
Market price-selling costs					
C. NEGOTIATED					
D. Other. Please specify.					

2.8. If more than one transfer pricing method is used, which of the following factors explains the rationale for using multiple methods?

- ☐ Different products
- ☐ Different responsibility centres
- ☐ Different locations
- ☐ Product life cycle
- ☐ Other. Please specify.

2.9. Do conflicts arise from transfer pricing?

- ☐ Yes, frequently. ☐ Yes, occasionally ☐ No, never

2.10. If conflicts arise, please state briefly the nature of conflicts.

- ☐ Opportunistic behaviour to improve divisional performance at the expense of overall company performance
 - ☐ Negative motivation to reduce costs
 - ☐ Perceptions of hostility between departments
 - ☐ Restricted flow of information
 - ☐ Lack of trust between divisions
 - ☐ Other. Please specify.
-

2.11. Do you use activity-based (ABC) costing?

- ☐ Yes ☐ No

2.12. Central corporate costs (overheads) are allocated to divisions based on:

- ☐ Actual use
- ☐ Apportionment (i.e. number of employees, revenue, square footage, etc.)
- ☐ Negotiation
- ☐ Other

2.13. Overall, are you satisfied with your present internal pricing system?

- ☐ Very satisfied
- ☐ Somewhat satisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Somewhat dissatisfied
- ☐ Very dissatisfied

3. Service product attributes

3.1. Within your organization which are the most important services which are traded internally expressed as a percentage of total company sales?

Service (brief description)	Approximate percentage of total company sales
A	
B	

3.2. **Do you allow domestic divisions to buy from external sources, products which are also internally provided?**

- ☐ Yes, domestic divisions are completely free
- ☐ Yes, subject to approval
- ☐ No

3.3. **If outsourced, please state the reasons for external sourcing.**

Item	Better quality	Better availability	Better price	Better service	Internal Capacity constraints	Desire to Maintain a second source	Other
A							
B							

3.4. **What is the approximate value of interdivisional trade as a percentage of total company sales?**

Extent of intra-divisional transfers	Please tick (✓)
0-19%	
20-39%	
40-59%	
60-79%	
80-100%	

4. Value

4.1. **How would you define value, as perceived by internal customers?**

- ☐ Value is low price
- ☐ Value is everything I want in a service
- ☐ Value is the quality I get for the price I pay
- ☐ Value is all that I get for all that I give
- ☐ Other. Please state.

4.2. **From a competitive advantage point of view, is it important to find out if and how internal customers value the services they acquire internally?**

- ☐ Yes
- ☐ No

5. Competitive advantage

5.1. Sources of competitive advantage

State your major sources of competitive advantage. These sources must be important to customers and those in which you have a significant advantage over competitors. The following list provides categories of advantage. Please tick (✓) appropriate column.

	1 No effect	2 A little effect	3 Medium effect	4 High effect	5 Very high effect
UNIQUE ASSETS					
IT systems (including software capability)					
Brand equity					
Efficiency-improving equipment					
Office automation					
Performance tracking systems					
Organisational knowledge and routines					
OTHER (please specify)					
UNIQUE SKILLS					
Employee capability					
Employee productivity					
Employee retention					
Motivated employees					
Entrepreneurial skills of employees					
Satisfactory employee compensation					
Focus on employee training and development					
Project management					
OTHER (please specify)					

5.2. Sustainability of sources of competitive advantage

Please tick (✓) the columns which you believe apply.

	1 Not possessed by major rivals	2 Not easily capable of being imitated by major rivals	3 Cannot be acquired in the market place	4 It is not easy to find a substitute
UNIQUE ASSETS				
IT systems (including software capability)				
Efficiency-improving equipment				
Brand equity				
Office automation				
Performance tracking systems				
Organisational knowledge and routines				
UNIQUE SKILLS				
Employee capability				
Employee productivity				
Employee retention				
Motivated employees				
Entrepreneurial skills of employees				
Satisfactory employee compensation				
Focus on employee training and development				
Project management				

5.3. Competitive strategy

To what extent do you agree with the following statements which mostly refer to internal transfers. Please tick (✓) appropriate columns.

	1 Strongly disagree	2	3	4	5 Strongly agree
We place considerable emphasis on the control of operating costs					
We emphasize our distinctive service products or image in our marketing communications					
We emphasize cutting of overhead costs					
We carefully monitor operations to help us keep costs under control					
We make extensive efforts to secure the lowest sources of supply					
We regularly develop new service products or significantly change the line of service products we offer					
We try to offer unique service products, enabling us to charge premium prices to external customers					

Competitive strategy cont'd.	1 Strongly disagree	2	3	4	5 Strongly agree
We give new service product development for internal customers top priority					
We aim to be the lowest cost supplier in our industry					
Our primary objective is to serve our external customers, therefore satisfaction of internal customers is insignificant					
Because we offer very similar products to the competition, we try to maintain competitive prices					
There is association between satisfaction of internal customers and satisfaction of external customers.					
We aim to offer superior service products to those of our competitors					
Information about sales performance is considered to be more important than cost control information					
Our service product line seldom changes					
As our customers are very price-sensitive, we devote considerable time and effort to improving efficiency					
We can obtain finance at relatively lower cost					
OTHER (please specify)					

To the respondent:

Thank you for your time and consideration in completing this form. RMIT University assures that all responses are considered strictly confidential, and no data will be associated with any individual or organisation.

Following information would help to enhance the validity of this research.

OPTIONAL TO COMPLETE

Name:..... **Contact Telephone Number:**.....

Which of the following best describes your title?

☐ CEO / Managing director ☐ CFO / Treasurer / Accountant ☐ Divisional Manager ☐ Other

Highest qualification held

☐ Master's or above ☐ Bachelor's ☐ Professional qualification ☐ Other

Total work experience

☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21 years +

Do you wish to receive a summary of aggregated research results when it is published?

☐ Yes ☐ No

If you wish to receive a summary of research results please enclose your business card or provide your address.

**THANK YOU FOR YOUR TIME AND PATIENCE IN COMPLETING THE
QUESTIONNAIRE**

APPENDIX 3A1

SOURCE AND/OR MOTIVATION FOR QUESTIONNAIRE QUESTIONS CORPORATE

Q	Question	Source
1	Which of the following industries best describes your firm's business?	ABS classification
1.2	What is the total number of employees in the organization?	ABS classification Yunker (1983)
1.3	What is the sales volume of your organisation in Australia?	Yunker (1983)
1.4	Which of the following best describes your organizational structure?	Meer-Kooistra(1994)
1.5	How is your firm organised with respect to responsibility centres?	Na
1.6	Are you subsidiary of a foreign company?	Na
1.7	If you are a subsidiary, where is the HQ of your parent company?	Na
1.8	Are divisions evaluated based on divisional results or corporate results?	Solomons (1965), Mehafdi (1990)
2.1	Who, generally, is responsible for setting transfer prices?	Arpan (1972), Benke and Edwards (1980), Eccles (1985)
2.2	In your organization, what is the influence of the role played by Chief Financial Officer in setting transfer prices?	Benke and Edwards (1980)
2.3	Generally how often are the transfer pricing decisions reviewed?	Na
2.4	What circumstances prompt a change in transfer price/method?	Eccles (1985)
2.5	In your opinion, relatively how important are each of the following objectives in your transfer pricing system?	Fremgen (1970), Benke and Edwards (1980), Tang (1981), Mueller, Gernon and Meek (1997)
2.6	For those objectives rated as important, how do you determine if the desired objectives in the transfer pricing system have been achieved?	na
2.7	From the point of view of the company, how often is each of the following transfer pricing method utilized for internal transactions?	Vancil (1979), Tang et al. (1979), Yunker (1983), Joye and Blayney (1990), Tang (1990), Drury et al. (1993), Alam and Hoque (1995)
2.8	If more than one transfer pricing method is used, which of the following factors explains the rationale for using multiple methods?	Na
2.9	Do conflicts arise from transfer pricing?	Lambert (1979), Eccles (1985)
2.10	If conflicts arise, please state the nature of conflicts	Lawrence and Lorsch (1967)
2.11	Do you use activity based costing?	Innes and Mitchell (1991), Emmanuel and Mehafdi (1994)
2.12	Central corporate costs are allocated to divisions based on.....	Cooper and Slagmulder (1998)
2.13	Overall, are you satisfied with your present internal pricing system?	Eccles (1985)
3.1	Within your organization, what are the most	Na

- important services which are traded internally expressed as a percentage of company sales?
- 3.2 Do you allow domestic divisions to buy from external sources products which are also internally provided? Modified Drury et al (1993)
- 3.3 If out-sourced, please state the reasons for external sourcing Na
- 3.4 What is the approximate value of interdivisional trade as a percentage of total company sales? Modified Tomkins (1973), Chenhall (1979), Benke and Edwards (1980), Eccles (1985), Drury et al. (1993)
- 4.1 How would you define value as perceived by internal customers? Zeithaml (1988)
- 4.2 From a competitive advantage point of view, is it important to find out if and how internal customers value the services they acquire internally? Na
- 5.1 State the major sources of competitive advantage. These sources must be important to customers and those in which you have a significant advantage over competitors. Bharadwaj, Varadarajan and Fahy (1993)
Day and Wensley (1988)
- 5.2 Sustainability of competitive advantage. Please tick the columns which you believe apply. Bharadwaj, Varadarajan and Fahy (1993)
Day and Wensley (1988)
- 5.3 Competitive strategy – to what extent do you agree with the following statements which mostly refer to internal transfers? Bowman and Johnson (1997)



QUESTIONNAIRE ON INTERNAL PRICING AND VALUE CHAIN

Please answer the questions in this questionnaire in relation to the service product stated in Q1.5.

1. Organisation

1.1. How do you classify your division?

☐ Cost centre
 ☐ Profit centre
 ☐ Revenue centre
 ☐ Investment centre

1.2. Is internal customer / supplier a (you may tick more than one box).

☐ Cost centre?
 ☐ Profit centre?
 ☐ Revenue centre?
 ☐ Investment centre?

1.3. Do you:

☐ Buy internally?
 ☐ Sell internally?
 ☐ Both buy and sell internally?

1.4. How do you classify the products you acquire? (*Please see footnote for definitions*)

☐ Simple⁴
☐ Complex⁵

1.5. Please provide a brief description of the major (in terms of value and/or significance) internal service that you receive from your internal suppliers. (*Please see footnote for definitions*)

Brief description of the internal product exchanged	Standardised ⁶ (S) / Nonstandardised ⁷ (NS)	Does external market exist Y (Yes) / No (N)

1.6. Are you free to buy this service externally?

☐ Yes, if we decide
 ☐ Yes, subject to approval
 ☐ No

⁴ **Simple:** customer exhibit reasonable understanding of product features and associated benefits.

⁵ **Complex:** Customers find it confusing and complicated with a resultant lack of understanding of features and benefits being apparent.

⁶ **Standardised:** delivered to customers without customization.

⁷ **Nonstandardised:** Products customized to customer's individual requirements.

1.7. Please state whether you agree with the following statement: “Within our organization, divisional goals are consistent with overall corporate goals.”

☐ Strongly agree ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Strongly disagree

2. Internal pricing

2.1. From the point of view of your division, which of the following transfer pricing method (s) are used for internal transactions? If more than one method is used please rank (i.e. 1, 2..) them in order of frequency.

	1 Always Used	2 Frequently used	3 Sometimes used	4 Rarely used	5 Never used
A. COST-BASED					
Variable cost at standard					
Variable cost at actual					
Variable cost plus					
Full cost at standard					
Full cost at actual					
Full cost plus					
Standard variable cost + contribution margin on the outside sale given up by the company					
B. MARKET-BASED					
Market-based (current)					
Market-based –adjusted (Market price-selling costs)					
C. NEGOTIATED					
D. OTHER. Please specify.					

2.2. Where intra-company pricing is determined through negotiations between two divisions, generally, negotiators have access to full data on alternative sources and markets and to public and private information about market prices.

I strongly agree

I strongly disagree

2.3. Please specify the most commonly used internal pricing method. Please tick the appropriate column.

	Cost centre to cost centre	Cost centre to profit centre	Profit centre to cost centre	Profit centre to profit centre	Cost centre to revenue centre	Revenu e centre To cost centre	Revenue centre to revenue centre
Variable cost at standard							
Variable cost at actual							
Variable cost plus							
Full cost at standard							
Full cost at actual							
Full cost plus							
Market-based (current)							
Market-based –adjusted (Market price-selling costs)							
Negotiated							
Standard variable cost + contribution margin on the outside sale given up by the company							
Other. Please specify.							

2.4. Transfer price of the tangible goods already includes charges for services; therefore we don't bill those charges separately where service is part of tangible goods.

I strongly agree

I strongly disagree

2.5. Do conflicts arise from transfer pricing?

☐ Yes, frequently

☐ Yes, occasionally

No, never

☐

2.6. If you experience conflicts arising from transfer pricing, please indicate the type of conflict by ticking the appropriate box below.

☐ Opportunistic behaviour to improve divisional performance at the expense of overall company performance

☐ Negative motivation to reduce costs

☐ Perceptions of hostility between departments

☐ Restricted flow of information

☐ Lack of trust between divisions

☐ Dissatisfaction with the company's internal pricing policy

☐ Other. Please specify.

2.7. What mechanisms are used to resolve conflicts arising from intracompany pricing?

- ☐ Forcing (a solution enforced top down)
- ☐ Smoothing
- ☐ Negotiation between the divisions involved
- ☐ Problem solving
- ☐ Arbitration committee
- ☐ There is no formal process

2.8. Cost drivers

Please tick (✓) for each item the degree to which it affects your costs.

	1 Strongly Disagree	2	3	4	5 Strongly Agree
Economies of scale					
Cumulative experience (learning curve)					
Product line breadth					
Capacity utilisation					
Interrelationships (linkages) among divisions					
Vertical integration (producing own inputs)					
Timing of market entry					
Policy decisions (product/segment choice)					
Institutional (legal and regulatory) costs					
Technology (process technology employed)					
Product configuration					
Linkages with suppliers or customers					
Total Quality Management					
Employee involvement					
Shared resources with other strategic business units					

3. Value

3.1. How would you define value of the internal service, as perceived by internal customers?

		1 Strongly Disagree	2	3	4	5 Strongly Agree
A	Value is low price					
B	Value is everything I want in a service					
C	Value is quality I get for the price I pay					
D	Value is all that I get for all that I give					
E	Other. Please specify					

3.2. **In your opinion, do you believe that there is a relationship between value created for internal customers and competitive advantage at the product level?**

☐ Most likely ☐ Likely ☐ Neither likely nor unlikely ☐ Not likely ☐ Not at all likely

3.3. **Do you use employ value chain analysis in your operations⁸?**

☐ Yes, there is a consistent and formalised process ☐ Yes, value chain analysis is employed occasionally ☐ No

3.4. **How important is it to price internal transfers with value creation for the internal customer, in mind?**

☐ Very important
☐ Quite important
☐ Undecided
☐ Of little importance
☐ Not important

4. Perceived benefit dimensions

How important do you believe each of the following is to buyers of internal services?
Please tick the appropriate box.

	ASSURANCE (Knowledge and courtesy of employees and their ability to convey trust and confidence)	1 Strongly Disagree	2	3	4	5 Strongly Agree
4.1	The behaviour of employees of internal supplier instills confidence in you					
4.2	You feel safe in dealing with your internal supplier (internal supplier is trustworthy)					
4.3	Employees in internal supplier are consistently courteous in handling your work					
4.4	Employees in internal supplier are competent, knowledgeable and skillful					

	RESPONSIVENESS (Willingness to help customers and provide prompt service)	1 Strongly Disagree	2	3	4	5 Strongly Agree
4.5	Internal supplier always keeps you informed about when services will be performed					
4.6	Employees of internal supplier are always willing to help you					
4.7	Employees of internal supplier are never too busy to respond to your requests quickly and efficiently					
4.8	Employees of internal supplier listen					

	to your problems, and when necessary visit your locations to better understand your problems					
4.9	Internal supplier provides quick answers and solutions to your problems					
4.10	Internal supplier has the ability to provide emergency service deliveries					
4.11	Internal supplier welcomes complaints and does whatever it takes to win you over					
	RELIABILITY (Ability to perform the promised service dependably and accurately)	1 Strongly Disagree	2	3	4	5 Strongly Agree
4.12	The employees of internal supplier provide service reliably, consistently and dependably					
4.13	When you have a problem, internal supplier shows a sincere interest in solving it					
4.14	Internal supplier performs the service right the first time					
4.15	Internal supplier provides accurate information and records					
4.16	You are confident that the internal supplier is telling the truth even when they give you a rather unlikely explanation					
4.17	Internal supplier keeps you informed about when services will be performed					
	EMPATHY (Caring, individualised attention the supplier provides)	1 Strongly Disagree	2	3	4	5 Strongly Agree
4.18	Internal supplier's employees give you individual attention					
4.19	Internal supplier has your best interests at heart					
4.20	Employees in internal supplier understand your specific needs					
4.21	Employees of internal supplier are sincerely concerned about your problems					
4.22	Insufficient internal customer insight is hurting our performance					
	TANGIBLES (appearance of physical facilities, equipment, personnel)	1 Strongly Disagree	2	3	4	5 Strongly Agree
4.23	Internal supplier's modern offices and their visual appeal affect my decision to do business					
4.24	Neatness of employee appearance and the appeal of the employees' dress are important					
4.25	Overall, tangibles is an important quality dimension for you					

	FLEXIBILITY AND INNOVATION	1 Strongly Disagree	2	3	4	5 Strongly Agree
4.26	Internal supplier has the ability to identify your needs before you raise them					
4.27	Internal supplier is committed to improvements					
4.28	Internal supplier is willing to meet your needs beyond the contract terms					
4.29	Internal supplier always provides help when you run into problem					
4.30	Internal supplier consistently introduces breakthrough solutions and new technologies in its services					
4.31	Internal supplier's services are one step ahead of what the competition offers					
	ALTERNATE SOLUTIONS AND CUSTOMISATION	1 Strongly Disagree	2	3	4	5 Strongly Agree
4.32	Internal supplier has the capability to tailor their offerings to match your needs					
4.33	Internal supplier has the ability to meet unique specifications for your services not offered by other suppliers					
4.34	Internal supplier has the capability of offering different services from many of their competitors					
4.35	Internal supplier usually offers a range of alternatives					
4.36	Internal supplier is always helpful in terms of assisting you in solving your problems					
4.37	Internal supplier has specialised expertise in your area of activity					
4.38	Internal supplier demonstrates comprehensive process knowledge of your business					
4.39	Internal supplier uses new technology to provide solutions in response to your problems					

5. Perceived sacrifice (cost) dimensions

	PRICE	1 Strongly Disagree	2	3	4	5 Strongly Agree
5.1	Generally, price charged for the service is fair and competitive					
5.2	Generally, I receive more value for the price charged					
5.3	Generally, price charged for the intermediary service input makes final service output more competitive					
5.4	I believe the internal supplier cares about reducing my costs without sacrificing what I get from their services					
5.5	The methods used in calculating internal prices are straightforward and easy to understand					
5.6	I always compare internal price with a reference price we have in mind					
5.7	I compare the cost of performing a given activity against our competitors' costs (and/or against the costs of a non-competitor in another industry that efficiently and effectively performs much the same activity)					
5.8	Internal price is the major determinant of value I perceive from an internal transaction					
	TIME / EFFORT / ENERGY (The time, effort and energy spent to acquire the service)	1 Strongly Disagree	2	3	4	5 Strongly Agree
5.9	In internal transactions, the process (effort, communicating, evaluating, negotiating, ordering, acquiring, using) is time consuming					
5.10	We have service level agreements (SLA) in place that prescribes mutual rights and obligations of both the internal supplier and internal customer					
5.11	I feel a high risk of psychological discomfort when I use an internal division's service					
5.12	Overall, the risk associated with the use of internal service is high					
	PSYCHIC COSTS (The mental energy spent in acquiring the service)	1 Strongly Disagree	2	3	4	5 Strongly Agree
5.13	In internal transactions, there is always a risk of not getting what you need and potential problems associated with timeliness and service quality					
5.14	Internal divisions offer one of the best warranties in the industry					

	OVERALL SERVICE VALUE	1 Strongly Disagree	2	3	4	5 Strongly Agree
5.15	The relationship between the divisions involved in transfer pricing benefits the firm as a whole					
5.16	Generally, the service quality of internal supplier is excellent					
5.17	Overall the total value derived from internally-supplied services outweighs total costs					
5.18	Your internal pricing system improves the accumulated value before the final product is delivered to the external customer					
5.19	Even if I could source from outside, I still would not hesitate to use the services rendered by the internal supplier					

To the respondent:

Thank you for your time and consideration in completing this form. RMIT University ensures that all responses are considered strictly confidential, and no data will be associated with any individual or organisation.

Following information would help to enhance the validity of this research:

OPTIONAL

Name:..... **Contact Telephone Number:**.....

Position: ☐ CEO/MD ☐ CFO ☐ Divisional Manager ☐ Other

Highest qualification held:

☐ Master's or above ☐ Bachelor's ☐ Professional qualification ☐ Other

Total work experience

☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ 16-20 ☐ 21 years +

I would like to receive a copy of aggregated results of this research:

☐ Yes ☐ No

If you would like to receive a copy of research results, please enclose your business card or state your address.

THANK YOU FOR YOUR TIME AND PATIENCE IN COMPLETING THE QUESTIONNAIRE

APPENDIX 3B1

SOURCES AND/MOTIVATION FOR QUESTIONNAIRE QUESTIONS DIVISION

Q	Question	Source, basis and / or motivation
1.1	How do you classify your division	Na
1.2	Is internal customer / supplier a cost, profit, revenue or investment centre?	Na
1.3	Do you buy internally, sell internally or both buy and sell internally?	Na
1.4	How do you classify the products you acquire?	Na
1.5	Please provide a brief description of the major internal service that you receive from your internal suppliers.	Na
1.6	Are you free to buy this service externally?	Drury et al. (1993)
1.7	Please state whether you agree with the following statement: "Within our organization, divisional goals are consistent with overall corporate goals".	Na
2.1	From the point of view of your division, which of the following transfer pricing methods are used for internal transactions?	Vancil (1978) Tang et al. (1979), Yunker (1983), Joye and Blayney (1990), Tang (1990), Drury et al. (1993), Alam and Hoque (1995),
2.2	Where intra-company pricing is determined through negotiations between two divisions generally negotiators have access to full data on alternative sources and markets and to public and private information about market prices: Strongly disagree....strongly agree	na
2.3	Please specify the most commonly used internal pricing method (between responsibility centres)	na
2.4	Transfer price of tangible goods already includes charges for services, therefore we don't bill those charges separately where service is part of tangible goods	na
2.5	Do conflicts arise from transfer pricing	Lawrence and Lorsch (1967)
2.6	If you experience conflicts arising from transfer pricing, please indicate the type of conflict by ticking the appropriate box below.	Lawrence and Lorsch (1967)
2.7	What mechanisms are used to resolve conflicts arising from intra-company pricing?	Lawrence and Lorsch (1967)

2.8	Cost drivers. Please tick for each item the degree to which it affects your costs.	Porter (1980, 1985)
3.1	How would you define value of the internal service as perceived by internal customers?	Zeithaml (1988)
3.2	In your opinion, do you believe that there is a relationship between value created for internal customers and competitive advantage at the product level?	na
3.3	Do you employ value chain analysis in your operations?	na
3.4	How important is it to price internal transfers with value creation for the internal customer in mind	na
4.1-4.4	Assurance	Parasuraman, Zeithaml and Berry (1988)
4.5-4.11	Responsiveness	Parasuraman, Zeithaml and Berry (1988)
4.12-4.17	Reliability	Parasuraman, Zeithaml and Berry (1988)
4.18-4.22	Empathy	Parasuraman, Zeithaml and Berry (1988)
4.23-4.25	Tangibles	Parasuraman, Zeithaml and Berry (1988)
4.26-4.31	Flexibility and innovation	Parasuraman, Zeithaml and Berry (1988)
4.32-4.39	Alternate solutions and customization	Parasuraman, Zeithaml and Berry (1988)
5.1-5.8	Price	na.
5.9-5.12	Time, effort and energy	Parasuraman, Zeithaml and Berry (1988)
5.13-5.14	Psychic costs	Parasuraman, Zeithaml and Berry (1988)
5.15-5.19	Overall service value	Zeithaml, Parasuraman and Berry (1990) Bowman and Johnson (1997)

APPENDIX 4

INTERVIEW GUIDE

APPENDIX 4A	Interview Guide / Corporate
APPENDIX 4A1	Source and / or motivation for interview questions / corporate
APPENDIX 4B	Interview guide / Division
APPENDIX 4B1	Source and/or motivation for interview guide / Division

APPENDIX 4A

INTERVIEW QUESTIONS FOR CORPORATE MANAGEMENT (CM)

1. Organisational Structure

1.1. Type of organisation

- ☐ Centralised
- ☐ Decentralised

1.2. If decentralized; the decentralisation base:

- ☐ Service type
- ☐ Service process
- ☐ Regions
- ☐ Market served
- ☐ Multiple bases

1.3. Types of responsibility centres

- ☐ Cost centre
 - ☐ Revenue centre
 - ☐ Profit centre
 - ☐ Investment centre
-

1.4. Are you a subsidiary of a foreign company?

- Yes ☐
- No ☐

1.5. If your answer is yes, where is the headquarters of your parent company?

- ☐ USA
- ☐ Germany
- ☐ France
- ☐ U.K.
- ☐ Other. Please specify.....

2. Strategy

2.1. What is your corporate strategy?

Stability

Growth

Retrenchment

Business Level Strategy (ies)

Improvement of the competitive position of the firm's services in the specific industry or market segment served

Functional strategy

Developing and nurturing a distinctive competence to provide the firm/business unit with a competitive advantage (imitation, technological leadership,

2.2. What do you use as a strategic planning technique?

Total Quality Management

Shareholder Value Analysis

Benchmarking

Core Competencies Analysis

Value Chain Analysis

Business Process Redesign (Re-engineering)

2.3. What is (are) your core competencies (particularly service-based)?

Core Competency:

Skills or knowledge sets allowing an organization to consistently perform an activity better than functional competitors and to continually improve on the activity as markets, technology and competition evolve.

Flexible and long-term platforms capable of adaptation and evolution - Dominating skills that the customer will continue to value over time.

2.4. How can you describe your general pricing policy (for external customers)?

2.5. How can you describe the relationship between your internal pricing and pricing of the final service to the external customer?

2.6. What are the sources of competitiveness for your service (s)?

3. Service attributes

3.1. Are services provided to external customers standardized or non-standardised?

3.2. Are internal services rendered standardised or non-standardised?

3.3. What are your major service product lines (in terms of revenue)?

3.4. *Extent of intra- divisional transfer of services*

What is the proportion of internal trade as a percentage of total company sales?

Extent of intra-divisional transfer of services	Please tick
0-19 %	
20-39%	
40-59%	
60-79%	
80-100%	

4. Sourcing

4.1. Does external market exist for divisional services?

Yes ☐

No ☐

4.2. If the answer is yes, for which services?

4.3. Do you allow your domestic divisions to buy from external sources services, which are also internally rendered?

Internal divisions are completely free ☐

Subject to approval ☐

No ☐

4.4. If outsourced; reasons for external sourcing?

	Better quality	Better availability	Better price	Better service	Internal Capacity Constraints	Desire to maintain a second source

5. Internal Pricing

5.1. What is your dominant corporate objective of your transfer pricing systems?

	Dominant Objective	Very important objective	Somewhat important objective	Not important
Ease of understanding				
Evaluation of divisional profits				
Goal congruence				
Managerial motivation				
Optimal pricing decisions				
Greater divisional autonomy				

Other (please specify)

5.2. Who sets transfer prices?

- Headquarters alone ☐
Divisional level alone ☐
Headquarters and divisional management together ☐

5.3. What data / information are used for making transfer price decisions?

5.4. How often are the transfer pricing decisions reviewed?

- ☐ Annually
☐ Semi-annually
☐ Other.....

5.5. What circumstances prompt a change in transfer price / method?

5.6. Transfer pricing method (s) used?

Variable cost at standard	
Variable cost at actual	
Variable cost plus	
Full cost at standard	
Full cost at actual	
Full cost plus	
Market-based (current)	
Market-based (adjusted)	
Negotiated	

Other: Please specify

5.7. What is your rationale for employing a particular method?

5.8. Number of transfer pricing methods used?

One	Two	Three	More
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.9. If more than one method is used, what is your rationale for using multiple methods?

5.10. Do conflicts arise from transfer pricing?

Yes ☐
No ☐

If your answer is yes, please specify:

5.11. Nature of conflicts?

5.12. How are they resolved?

5.13. Do you use activity-based costing (ABC)?

- Yes ☐
- No ☐
- Under consideration ☐

6. Value

6.1. What is your definition of the customer-perceived value?

6.2. Is it important for you to ascertain what internal customers value?

- | | |
|--------------------------|--------------------------|
| Yes | No |
| <input type="checkbox"/> | <input type="checkbox"/> |

Please explain your rationale.

6.3. How likely do you think it is the relationship between value created for internal customers and competitive advantage?

- ☐ Most likely
- ☐ Likely
- ☐ Neither likely nor unlikely
- ☐ Not likely
- ☐ Not at all likely

6.4. Do you employ value chain analysis?

- ☐ Yes
- ☐ No

6.5. If your answer is yes, what is your dominant objective in using the value chain analysis?

6.6.Can you describe the typical chain of activities for (specified) service?

6.7. How information relating to external customer wants and needs is communicated from customer contact personnel back through their internal suppliers?

APPENDIX 4A1

SOURCES AND/OR MOTIVATION FOR INTERVIEW QUESTIONS CORPORATE

Q	Question	Source, basis and /or motivation
1.1	Type of organization	na
1.2	Decentralisation base	na
1.3	Types of responsibility centres	na
1.4	Are you a subsidiary of a foreign company?	na
1.5	If your answer is yes, where if the headquarters of your parent company?	na
2.1	What is your corporate strategy?	na
2.2	What do you use as a strategic planning technique?	na
2.3	What are your core competences?	na
2.4	How can you describe your general pricing policy?	na
2.5	How can you describe the relationship between your internal pricing and pricing of the final service to the external customer?	na
2.6	What are the sources of competitiveness for your service?	na
3.1	Are services to external customers standardized or non-standardised?	na
3.2	Are internal services standardized or non-standardised?	na
3.3	What are your major service product lines?	na
3.4	What is the proportion of internal trade as a percentage of total company sales?	na
4.1	Does external market exist for divisional services?	na
4.2	If the answer is yes, which services?	na
4.3	Do you allow your domestic divisions to buy from external sources services which are also internally rendered?	na
4.4	If outsourced, reasons for outsourcing?	na
5.1	What is your dominant objective of transfer pricing?	Vancil (1978) Tang et al. (1979), Yunker (1983), Joye and Blayney (1990), Tang (1990), Drury et al. (1993), Alam and Hoque (1995),

5.2	Who sets transfer prices?	Arpan (1972), Benke and Edwards (1980), Eccles (1985)
5.3	What data/information are used for making transfer pricing decisions?	Emmanuel and Mehafdi (1994)
5.4	How often are the transfer pricing decisions reviewed?	na
5.5	What circumstances prompt a change in transfer price/method?	Eccles (1983)
5.6	Transfer pricing methods used?	Vancil 91979), Tang et al. (1979), Yunker (1983), Joye and Blayney (1990), Tang (1990), Drury et al. (1993), Alam and Hoque (1995)
5.7	What is your rationale for employing a particular method?	Emmanuel and Mehafdi (1994)
5.8	Number of transfer pricing methods used	Emmanuel and Mehafdi (1994)
5.9	If more than one method is used, what is your rationale for using multiple methods?	Emmanuel and Mehafdi (1994)
5.10	Do conflicts arise from transfer pricing?	Lawrence and Lorsch (1967)
5.11	Nature of conflicts?	Lawrence and Lorsch (1967)
5.12	How are they (conflicts) resolved?	Lawrence and Lorsch (1967)
5.13	Do you use activity-based costing?	Drury et al. (1993)
6.1	What is your definition of the customer-perceived value?	Zeithaml (1988)
6.2	Is it important for you to ascertain what internal customers value?	na
6.3	How likely do you think it is the relationship between value created for internal customers and competitive advantage?	na
6.4	Do you employ value chain analysis	Porter (1985)
6.6	Can you describe the typical chain of activities for the service?	Porter (1985)
6.7	How information relating to external customer wants and needs is communicated from customer contact personnel back through their internal suppliers?	na

APPENDIX 4B

INTERVIEW QUESTIONS – DIVISIONAL MANAGEMENT (DM)

SERVICE ACQUISITION

1. How do you classify your division?

- ☐ Cost centre
- ☐ Profit centre
- ☐ Revenue centre
- ☐ Investment centre

2. What service (s) services do you buy internally?

3. Is the internal supplier a:

- Cost centre? ☐
- Profit centre? ☐
- Revenue centre? ☐

4. Are those services you acquire standardised or tailored for your individual requirements?

5. How do you classify the service you acquire? Simple or complex?

Simple services: Customers exhibit a reasonable understanding of service features and associated benefits and will be able to perform a satisfactory evaluation of the service. Such services are typically of low risk nature.

Complex services: Customers will find confusing and complicated with a resultant lack of understanding of features and benefits being apparent. Evaluation will also prove to be difficult. Such services are likely to be of a medium to high-risk nature.

6. Are you free to buy this service externally?

- Yes ☐
- No ☐

7. What are the key attributes you seek in internal acquisitions?

	Very Important 1	Important 2	Neither important nor unimportant 3	Unimportant 4	Very Unimportant 5
Reliability					
Responsiveness					
Assurance					
Alternative solutions					
Service customisation					
Price					
Courtesy					
Tangibles					
Security					
Access					
Communication					
Understanding the customer					

8. Other attributes (please specify)

9. What is the amount charged for this service?

10. What is your internal reference price (if any) for the selected service product?

11. What is the value you would you be willing to pay for the service?

12. Do you have Service Level Agreements (SLA) in place?

☐ Yes

☐ No

If the answer is yes:

12.1. How does an SLA affect the value you derive from internal transactions?

13. What is your definition of customer-perceived value? Is the concept of customer-perceived value important for you? Why? (Broad discussion on value)

Value is low price
Value is everything I want in a service
Value is the quality I get for the price I pay
Value is all that I get for all that I give

14. In your evaluation what is the total amount of sacrifice (monetary price, time, effort, energy, and psychic cost) resulting from the acquisition of the service?

15. In your opinion, what is the benefit (perceived value) that you have obtained from this transaction?

Benefit examples:

Responsiveness	Tangibles
Reliability	Alternative solutions and customisation
Assurance	Flexibility and innovation
Empathy	

16. What is the industry benchmark (in terms of cost and price) for the service bought?

17. Any conflicts arising from internal pricing? And how are they resolved?

18. What are your primary cost drivers?

Shank and Govindarajan (1993)

Structural

Scale –size of the investment, marketing resources, etc.

Scope – degree of vertical integration

Experience – years

Technology – process technologies used in each step of the firm's VC

Complexity (breadth of product line)

Executional cost drivers

Work force involvement (participation)

Total Quality management

Capacity utilization

Service configuration

Linkages with suppliers or customers

Shared resources with other SBUs (Porter (1985)

SERVICE PROVISION

19. What service (s) do you provide internally?

20. Is the buying division a:

Cost centre?

Profit centre?

Revenue centre?

Investment centre?

21. Are those services you provide standardised or tailored for individual customers?

22. How do you classify the service you provide? Simple or complex?

Simple services: Customers exhibit a reasonable understanding of service features and associated benefits and will be able to perform a satisfactory evaluation of the service. Such services are typically of low risk nature.

Complex services: Customers will find confusing and complicated with a resultant lack of understanding of features and benefits being apparent. Evaluation will also prove to be difficult. Such services are likely to be of a medium to high-risk nature.

23. Is there an external market for your services? If there is one, are you allowed to offer your services to external customers?

24. Are your internal customers free to source your services externally?

Yes ☐
No ☐

25. Who are your major competitors for this service?

26. What internal price would you typically charge for the service?

27. On what basis, is the internal customer charged?

28. What is your definition of customer –perceived value? How important is it to add value to services during internal exchanges? (Broad discussion on value)

Value is low price
Value is everything I want in a service
Value is the quality I get for the price I pay
Value is all that I get for all that I give

29. What do you do to provide superior value to your internal customer?

30. What do you think is the cost of providing this service? How does it compare with your major competitors?

31. What attributes do your internal customers use to evaluate your offering? Rank in order of importance.

Reliability
Responsiveness
Price
Assurance
Empathy
Other

32. Do you think the charge you have made is suitable for your internal customers? If yes, why?

33. Do you think the charge you have made is suitable for the firm as a whole? If yes, why?

34. How does the service you render contributes value to the buying division's output?

35. Can you estimate the cost of assets tied for the provision of this service?

36. In your evaluation what is the total amount of sacrifice (monetary price, time, effort, energy, and psychic cost) incurred by your internal customer (price that the internal customer would be willing to pay)?

37. Do you experience conflicts emanating from transfer pricing? If you do, what kinds of conflict arise and how are they resolved?

38. What is the dominant objective of your transfer pricing policy?

(Heskett et al. 1997)

Which divisions in this organization are your most important customers?

What are their needs?

What is the gap between their needs and your current performance?

What are the costs and payoffs of closing this gap

39. Any conflicts arising from internal pricing? And how are they resolved?

40. What are your primary cost drivers?

Shank and Govindarajan (1993)

Structural

Scale –size of the investment, marketing resources, etc.

Scope – degree of vertical integration

Experience – years

Technology – process technologies used in each step of the firm's VC

Complexity (breadth of product line)

Executional cost drivers

Work force involvement (participation)

Total Quality management

Capacity utilization

Service configuration

Linkages with suppliers or customers

Shared resources with other SBUs (Porter (1985))

APPENDIX 4B1

SOURCES AND/OR MOTIVATION FOR INTERVIEW QUESTIONS DIVISION

SERVICE ACQUISITION

Q	Question	Source, basis and /or motivation
1	How do you classify your division?	na
2	What services do buy internally?	na
3	Is the internal supplier a....	na
4	Are those services you acquire standardized or tailored for your individual requirements?	na
5	How do you classify the service you acquire? Simple or complex?	na
6	Are you free to buy this service externally?	na
7	What are the key attributes you seek in internal transactions?	Parasuraman, Zeithaml and Berry (1988)
8	Other attributes?	na
9	What is the amount charged for this service?	na
10	What is your internal reference price (if any) for the selected service product?	na
11	What is the value you would be willing to pay for the service?	na
12	Do you have service level agreements in place?	na
12.1	How does an SLA affect the value you derive from internal transactions?	na
13	What is your definition of customer-perceived value?	Zeithaml (1988)
14	In your evaluation, what is the total amount of sacrifice resulting from the acquisition of the service?	Parasuraman, Zeithaml and Berry (1988)
15	In your opinion what is the benefit that you have obtained from his transaction?	Parasuraman, Zeithaml and Berry (1988)
16	What is the industry benchmark for the service bought?	na
17	Any conflicts arising from internal pricing?	Lawrence and Lorsch (1967)
18	What are your primary cost drivers?	Shank and Govindarajan (1993)

SERVICE PROVISION

Q	Question	Source, basis and /or motivation
19	What services do you provide internally?	na
20	Is the buying division a....?	na
21	Are those services you provide standardized or tailored for individual customers?	na
22	How do you classify the service you provide?	na
23	Is there an external market for your services?	na
24	Are your internal customers free to source your services externally?	na
25	Who are your major competitors for this service?	na
26	What internal price would you typically charge for this service?	na
27	On what basis is the internal customer charged?	na
28	What is your definition of customer-perceived value?	Zeithaml (1988)
29	What do you do to provide superior value to your internal customer?	na
30	What d you think is the cost of providing this service?	na
31	What attributes do your internal customers use when evaluating your services?	Parasuraman, Zeithaml and Berry (1988)
32	Do you think the charge you have made is suitable for your internal customers?	na
33	Do you think the charge you have made is suitable for the firm as a whole?	na
34	How does the service you render contributes value to the buying division's output?	na
35	Can you estimate the cost of assets tied for the provision of this service?	na
36	In your evaluation what is the total amount of sacrifice incurred by your internal customer?	Na
37	What is the dominant objective of your transfer pricing policy?	Fremgen (1970), Benke and Edwards (1983), Tang (1981), Mueller, Gernon and Meek (1997)
38	Any conflicts arising from internal pricing?	na
39	Any conflicts arising from internal pricing?	Lawrence and Lorsch (1967)
40	What are your primary cost drivers?	Shank and Govindarajan (1993), Porter (1985)

APPENDIX 5

INTERVIEW SCHEDULE

**APPENDIX 5
INTERVIEW SCHEDULE**

A	22 August 2004 10.00	Mike Turner Sponsorship Manager	Mayne Nickless Level 21, 390 St Kilda Road Melbourne 0402 894 721 /9 868 0700
B1	1 September 2004 10.30	Russell Gee Asia Pacific Verification Manager	Nortel Networks Level 4, 380 St Kilda Road Melbourne 8 866 4000
C	3 September 2004 15.30	Brian Buckley Specialist Global Markets	Commonwealth Bank of Australia 12 th Floor, 385 Bourke Street Melbourne 9675 7839 /0404 047209
B2	17 September 2004 16.00	Justin Wood Project Manager Core Project Management	Nortel Networks Level 4, 380 St Kilda Road Melbourne 3004
B3	26 November 2004 10.00	Altay Ayyuce Director –Sales and Account	Nortel Networks Level 5, 380 St Kilda Road Melbourne 8 866 4000
D	8 April 2005 11.00	Andrew Gibson General Manager BMW Finance	783 Springvale Road Mulgrave 9 264 4000
E	19 April 2005 16.30	Kate Nicholls Business Manager Vecci	486 Albert Road East Melbourne 8 662 5336 /0409 909 694
F	29 April 2005 11.00	Sandy Filby McCannAustralia Chief Financial Officer	35-37 Bank Street South Melbourne 9 993 9385
G	11 July 2005 14.00	Barry Savage Head of Strategic Cost Management Group	ANZ Bank Head Office Level 18, 100 Queen Street Melbourne 9 273 4647
B4	26 August 2005 14.00	Mesut Tufan Testing Department	Nortel Networks Level 5, 380 St Kilda Road Melbourne 8 866 4000
H	27 September 08.30	Christopher Rowe Deputy Regional Manager	Singapore Airline Group 416-420 Collins Street 9 254 0332 / 0408 747 766
I	7 October 2005 07.30	Andreas Lundgren Business Manager	BMW Niederlassung 209 Kings Way 0409 667 777
J	24 October 2005 11.00	Onur Terzioglu Project Co-ordinator	Ericsson Australia Level 37 360 Elizabeth Street Melbourne 3000 9 301 1000

APPENDIX 6

SAMPLE INTERVIEW TRANSCRIPT

APPENDIX 6-SAMPLE INTERVIEW TRANSCRIPT

NORTEL NETWORKS

380 St Kilda Road
Level 4

Telephone: 8 866 4000

Interviewee: Russell Gee
Asia-Pacific Verification Manager

Date: Wednesday, 1 September 2004

Time: 10.30 am

Venue: Nortel Networks 380 St Kilda Road

INTERVIEW TRANSCRIPT

BT

This is organisational structure. How would you consider yours? As centralized or decentralized?

RG

Centralised.

BT

Decentralised or decentralized?

RG

Centralised.

BT

Centralised. Thank you.

BT

What type of organisational structure

Centralized

Centralized, Yeah.

BT

Centralisation base. Is it based on service type, service process? By region?

RG

Sorry

RG

If decentralized?

BT

Sorry

BT

Eeeh. What sort of responsibility centers do you have? Cost center or profit center?

RG

Cost center

BT

Cost center

BT

And subsidiary of a foreign company?

RG

Correct.

Yes, yes, US and Canada.

BT

And, what can you say about the corporate strategy of Nortel?

RG

Overall corporate strategy?

BT

Overall corporate strategy.

RG

market share

Market share. Market share. Market share in leading edge technology.

And obviously an increasing market share.

BT

Yeah. What sort of techniques do you use for strategic planning purposes, like total quality management, shareholder value analysis, benchmarking, core competency analysis ?

RG

Okay, I guess Total quality management. It's all process-driven IN THE LINE OF . ISO 9000 or RSA 9000. So we are accredited.

Eeeh. Shareholder value analysis. I can't really comment on that. That comes

BT

Yeah yeah yeah.

Or ISA 9000.

RG

Probably not, I would say only this much. More the way we are structured as

BT

Do you also use value chain analysis in your operations..

RG

Eeeh. Probably not. I wouldn't see it as much. It's more back in the global operations.

But the way we are structured is, we have a, we have a global operations, and it has core functions.. We have core functions. I don't really get involved in it. Other core functions here other core functions there. Little silo after silo. So.. The...Yes, there is value chain analysis .It' not done through. I don't get involved in it.

BT

Yeah. Yeah.

BT

How did you find your core competencies?

RG

What are your competencies?

RG

Eeeh. In terms people or ? IN terms of output?

BT

Core competency in terms of a competency that you, in your opinion that you perform better than your competitors that gives you some sort of edge in the market place?

RG

Eeeh, how do we measure that?

BT

No, what sort of competencies in your opinion, do you have?

RG

A leader in the field? A leader in the industry.

BT

Can you just say it is based on technology or based on services?
Is it based on technology?

RG

Based on technology and market share.
And on services, it has been saying from customer surveys which we have both customer and employee surveys.

BT

On employee surveys. Is that for example if services transferred from one department from A to B. Do you survey those people about the quality of service they received from their internal supplier.

RG

No. The employee surveys are more internally focused on people only. It's people only. SO, the philosophy here is. So, it's people only. The customer survey. It's obviously more focused on customers. It's done on delivery. It's done on product policy. It's done on time limits. It's done on you know per sale support and services.

BT

On employee survey. What is the purpose of them?

RG

The employee survey. It's on employee satisfaction within the company.

BT

All right.

RG

So, it's based on here people are at the moment. What sort of functions they are doing. And a series of questions. For example, you know, how approachable they are, how top leadership people are in their communication. Would you work at Nortel again? That's more personal thing, you see. What the company can do to especially environmentally..

BT

What can you say about the general pricing policy for external customers?

RG

Yes. So,eeeh, pricing policy for external customers. Okay, Obviously you've got volume customers, we have got one off customers. for one off customers.

So, eeeh, pricing policies will fluctuate, from size to size of the business. That will be the evidenced in the that size of the margin that we would obviously select. Eeeh, and also just count for established and large customers.

BT

Actually, what I am wondering is.. cost based or competitive pricing. Is it something general or is it case by case?

RG

It's really tough. You really need a sales person. I am getting angled by the question.

At the generic level?

BT

At the generic level.

RG

We are selling a product for example. We can apply cost and that consists a - I guess that's an indication of where we are as a competitor. Is that what you're looking for?

BT

Yeah. Yeah. Yeah.

RG

That's on all services and products- everything you require to deliver to a customer. I guess over a period of time the sales and marketing teams would generate via cost sales variance to go into this market.

BT

Yeah

Is there, in your opinion, is there any relationship between your internal pricing and external pricing?

RG

Aaah. Yes.

BT

Hii. Hii

RG

It's called the margin. Hehh Hehhh

BT

Pardon

RG

It's called "the margin".

BT

Margin of?

RG

Yeah, so the way the company operates at the moment is at thethere will be a price. .and All the departments. All these what we talked about and all cost centers will become a cost of net price.
That's why all the departments work.

BT

All right. Can that be said that all these costs are aggregated here

RG

Correct.

BT

that may or not be the basis of external prices?

RG

Yeah.

RG

So we have a series of forms. What we call. A form, B form, C form. A form is normally used for services. All the human services required to be delivered what we're doing for human services. We will have equipment costs of what we are actually selling., and the costs to Nortel

BT

Yeah

RG

and costs to Nortel I can't recall which format. And some other incidental costs. There will be a total. And then the negotiation starts within the company to now sell this at a margin. So obviously from the top down sales people will hold you can't go under a particular margin. So in these costs, targeting too high in the margins coming down when the negotiation starts back to me to see if I can reduce my costs. SO to maintain that margin is too complicated.

BT

What are the sources of competitiveness for your services?

RG

Well. Heh heh heh. Aaah. Say, I'll charge a fixed rate. I am a cost center. I have zero budget. When I say a zero budget everything I spend

BT

You charge a fixed rate? that I must spend.

BT

Internal customers or external customers.

RG

I only ever charge to internal customers. Okay. So the way the department operates is. Aaah, we look at total compensation for all my employees including my salary. Salaries and benefit. We look at training we look at annual leave. Eeeh, We look at all the travel and living that we will incur. I get my budget. For example 30 million dollars. And then we work out how many workable hours there are. And we come up with an hourly rate. So effectively, as my employees are working on projects charging other internal departments, I recover that money back into my department every month. And I should end up with zero. Whatever the cost of the company to employ us I need to bring the same money back from other departments . SO that rate, my rate is revised, obviously on an annual basis. As I am more employed , I am less employed. So I am not a not a revenue cost center, at all. obviously, so I am not a revenue cost center. I purely need to recover all the money that the company spends on having me there.

BT

Services that you provide to external customers, Russell, can we say they are standardized or non-standardised?

RG

I would say standardized. Technical services.

BT

And for internal services in the organization, rendered standardized or nonstandardised?

RG

Standardised.

BT

In terms of what, are the major product lines, service product lines of offered by Nortel, what are the major lines? in terms of probably their revenue generating capability

Customer service support which will be your warranties
And extended warranty and turnkey contracts.

And the service side is the negotiating most contracts and providing those services.

BT

Do you also offer business solutions ? Would that be another business line??

RG

On some lines of business, yes. Yeah. That's a tough one. Because it's more so in Asia. It changes from country by country even customer by customer. We are seeing a little bit more customers coming up and saying Nortel why aren't you offering Turnkey solutions. So that we house the equipment. Yes we do offer total business, end-to-end or turnkey type of operations

BT

But in terms of revenue for Nortel?

RG

They are a key services.

BT

Eeeh.

The proportion of internal trade as a percentage of total company sales? Can we say between 0 to 19% or..... extent of intra-divisional service value

RG

Eeeh. What is the proportion of internal trade as a percentage of total company sales? SO I guess we have to – we would be running at around I would say the 40-59%.

BT

Does internal market exist for your services?

RG

Yes.

What is the proportion of internal trade. I guess what we are looking for here is Cost versus the revenues.

BT

For internal service you provide. Does any external market exist for them?

RG

Yes.

All the people we have retrenched. They are contractors. I hope I am answering correctly. We bring people if we need to.

For part and service support and extended warranty.

BT

Is there any, for example in your case.....

RG

There are competitors.

BT

No within. There are competitors providing similar services..

RG

They can. Yeah.

There are service organizations. They are trying to win these contracts.

BT

Also can be purchasers.

RG

There are a lot of negotiations. Nortel has proprietary information.

BT

Those internal divisions. Do you allow internal divisions to buy from external sources services which are internally rendered?

RG

No. No. They wouldn't do that.

BT

So it's not even an option

RG

When you are saying buy. Buy the services off these people?

BT

No for example. If A, say A and B. and B requires services from A. and those services are also available from several vendors. So can B go to external vendors?

RG

Oh. Sorry. Yes. Yes..

BT

They can.

RG

Yes.

BT

Do they need any approval for that or are they free?

RG

No. Approval. Approval.

BT

And if they are outsourced what are the main reasons for external outsourcing?

RG

It's the current resourcing at the time. It's normally no resourcing available internally.

BT

Oh. I see.

RG

It's more an overflow situation. Yeah.

BT

You don't do this unless...

RG

Correct.

But having said that. That's on a day-to-day operational basis. But obviously at the top there are areas of the company where executive management would look at .

Saying that is going to be more cost-effective to outsource the whole function. Yes that occurs.

BT

I see what you mean.

What is your dominant corporate objective of your transfer pricing system?
Ease of understanding has to be dominant, or evaluation of divisional profits.

RG

What is your dominant corporate objective of your transfer pricing system? I guess the ease of understanding. Should be the dominant.

Evaluation of divisional profit. I am a non-profit center.

BT

By the same token you have targets to achieve.

RG

I do. Evaluation of divisional profits or losses.

BT

I see what you mean. Yeah I see what you mean. Yeah.

RG

All of a sudden I have 100,000 dollars of profit at the end of the year. I won't.

BT

Ahh ahhh

BT

Who sets transfer prices?

RG

Headquarters

BT

You told me that you probably use ltd hours

RG

You know. All my information. I populate. I populate..... And they will come back.

BT

And, what sort of information is used for making decisions, transfer making decision?

RG

Just as I said.

Total cost of the department to the company.

BT

How often the transfer pricing decisions reviewed?

RG

Ehh, it's typically annually. However, if we have had cause, we look at it after six months.

BT

Yeah

RG

Particularly when we have huge. Because all our prices in US dollars. Internal Pricing is also in US dollars.

BT

All right. I thought you have to review quite often depending on contract...

RG

So, when we have huge fluctuation in the exchange rates.

BT

So, what circumstances prompt a change in transfer price or the method?

RG

Eeeh. I would just say reorganizational structure.
That involves

.....

BT

In terms of transfer pricing methods used, eeeh. can we classify either in here or could be somewhere else.

RG

I'd say full cost, actual.

BT

And the reason for employing this method?

RG

Enforced. Hahhhahh

BT

Are you using one method or more than one method?

RG

One method. Purely what we call a loaded labour rate.

BT

Do conflicts arise from internal pricing?

RG

Definitely..

BT

Can you tell some about the nature of conflicts?

RG

The, the biggest conflict I had if I can probably, probably show here. We have a project management team who works directly to a sales account. And the inputs that the project management will require will come from the likes of engineering, my team which we call ourselves verification, or verification office we have. installation and commissioning. And they also obviously need to see the actual hardware costs.

We look at the product and typical services to implement that to come up with an internal cost. If it's going to cost more than 1,000. These teams vary in size. So we could have twenty there, ten there, fifteen there. Eeeh, the larger the team what we find typically They work the same ways that I do in terms of they are a zero cost to the company. They recover. So I could be \$100 an hour, this guy could be 70 dollars an hour and this one could be 65 . So the conflict arises here as to why I am so expensive. So this is the conflict so far. I just say we provide the premium service.

BT

Yeah. How do you resolve?

RG

So I just say we provide premium service.

BT

So you say you provide premium service. How do you resolve?

RG

we provide high-level service. So if you look at the complexity of the service then the skills and f the people required to perform this function as opposed to this function is high. That's normally when a conflict comes in. The other is as I said previously, all my costs are bundled. And then we work out what our hourly rate will be. How is my budget costs will be overseas travel and living you know when I send employees away.

So when I have a local customer, when I have a job locally in Melbourne or in Sydney, I am charging the same rate to do that job as I would in Hong Kong. The team here saying "Why can't I get a reduced rate", because you are being pouring any additional costs to do it.

These are the only about the two contracts I have.

BT

Russell, in your costing, do you use activity based costing?

RG

Eeeh . Can you elaborate?

BT

Are you costing each activity separately.

RG

Each activity I do?

BT

Yeah. Every single activity you do.

RG

We breakdown to logical activities. In order to complete a project we have a series of steps that our team needs to do. Yes I cost based on key functions and activities.

BT

Every single activity you do.

BT

Russell what is your definition of customer perceived value.

RG

I would say my perception of the value is when we deliver what we say we will deliver for the price that was agreed. So that's from a customer's perspective.

BT

Is it important for you to ascertain what internal customers value?

RG

Yes. Yes. Particularly as a when I work in project management teams, I need to understand what is important to them.

BT

All right yeah.

How likely do you think there is a relationship between the value created for internal customers and competitive advantage?

RG

It can only be in the cost reductions.

BT

Is that likely or most likely?

RG

Most likely.

BT

And, Do you employ value chain analysis

RG

We had talked about it.

BT

Typical value chain for your activities? Probably you have drawn this..

You have already described the typical value chain of activities for your service.

BT

When you receive order from customers. How is it communicated back to these different chains? Their needs and wants?

RG

They will come via the project management office. And project management office will then go to individual groups. And mine was.... These two things are being going on here. We build models on what we believe on a one for one type job. Sale, sale, sale. A lot of time I can plug in budgetary figures. I build these models to streamline this process. So there is another team, I suppose it's the supply chain management, team that operate there. In terms of building these models, when something doesn't fit the model they come back to these people and they start extracting the cost. Even in the model has been consulted, and then that is, also after they extracted the information from the model, the automation, that has been fully bound to these teams to ensure solidity.

BT

All right. Yeah Yeah.

BT

Eeeh Do you buy any service internally.

RG

Only when I overload.

BT

What do you mean?

RG

When I run out of people to get somebody from another team. But that's not what I call a purchase. I would just have that person for the needed time for the same project.

BT

I see what you mean.

BT

Do you have service level agreements?

RG

Aaah. You mean between internal departments?

RG

We do have service level agreements. Yes. Yes, we do.

BT

Does that really affect the value for example an internal department derives from internal transactions?

RG

Value in a dollar sense?

BT

No, Value In terms of their perception. For example if there is any service level agreement perhaps I will be more assured that the service will be delivered as I have agreed for the price and perfection, so probably I may be deriving more value as a result of SLA.

They are serving your purpose.

RG

Yes, most definitely.

BT

They are serving your purpose.
I may deriving more value

RG

Yes. Most definitely. We operate on I call two subsidiaries. One is technology which is a global team. And we have all the rest of Nortel. So all our services are product-related issues that come from technology. So we must have all service level agreements in place. And we work to turnaround periods on resolution.. So those agreements are in place now. Obviously, they create value.
Hope I am answering this one.

BT

You are hoping that they create value. Has that been measured?

RG

Yes, measured strictly. The targets are very very demanding. And in fact some of these other teams, when I say technology. And I make a very good reference here to Netas. OK, Netas is one of our customers, internal customers. They are providing us the resolution to problems. And I believe over there targets are strict. and in accordance with Nortel and Netas agreed to and negotiated. And teams over there their money their salaries are tied to that Service level agreement. So they have some very very solid targets. So the value we see it, we can be assured at this end, when we raise the problem we 'll have a resolution within a defined period. I guess from my perspective and for my team, and many other teams across the other product lines, there would be the many SLAs for technology teams and design teams.

BT

Do you measure competitors for your service?

RG

No. There are companies out there to provide the service but not to us.

BT

Price charged for the service depends I guess.

RG

What my department costs to the company.

BT

And, in terms of customer perceived value. Although you are not buyer of any internal services, probably this question should be asked to project department.

BT

In terms the cost of service you that provide how does it, in your view, compare with your major competitors?

RG

Yeah, I can't answer that. I don't have, eee, I don't have any pricing structures relating to internal operations of our competitors.

.....
BT

What attributed do your internal customers use to evaluate your offering.
Reliability, assurance, empathy?

RG

I would say price and assurance. Assurance is when we do the job for the price.

1. Price
2. Assurance
3. Responsiveness
4. Reliability
5. Empathy

BT

Yeah Yeah.

BT

When you charge to your internal customers, how do you know if the price you are charging is suitable.

Or is not an issue?

RG

No it's not normally issue. As I said over the period of time years I managed to build the models.

So I have a pretty good base to work off for every job or for a component of that model. And then for the little differences, we can add the additional cost onto that.

So,

BT

That was for your department. The other question for the whole organization.

Is that issue for you to ensure the price charged is suitable for the firm as a whole?

RG

Eeh. The charge you have made is suitable. Yes. I'd say yes. There is no way this guy is going to accept it. So the feedback I get. This I make a mistake. Which I have.

I get a call from this guy to say that you did this job for this cost, you are doing a similar job for more. Why? It would normally be an error. So, yeah, these people typically pick it up.

BT

How does services you render contribute value to this buying division's output?

RG

Uuuuh. It's probably not why you are here. It's a tough, hard one to measure because I am not a profit center. I have a cost to recover to a zero budget. I am bound by what I charge. The only you can see value then is services that we provide for the net charge. I would do what we would say we will do, we will deliver what we said we would deliver . When we won't incur additional costs.....

BT

For example before you charge, is it important for you to find out before you charge for example what is important for them. Or do you assume they accept.

RG

What's important for these people. It's always the price. Okay. They will always comeback and ask me to sharpen the pencil. And get it now. So the price is very important. At the same time, let's be a bit realist, as I said we do a lot of model work we have done that job before for those hours and for those costs successfully. We should be able to apply that same model. Some of the questions come up about the efficiency of the department. To ay you have done it before. Can't we do it smarter

The next time and reduce your actual service costs. So they are up to negotiations we get into.

Yes, we can reduce costs based on internal efficiency, internal improvement, lessons learnt, professional process But the only way the price can come down is how our policy to be more efficient. That is not the only variable in the price instruction. Our policy is to do the job in less hours.

Can you estimate the cost of the assets tied to the provision of the service. You told me previously about the labour cost. Are the assets also included.

RG

It's purely labour.

BT

Purely labour? Yeah.

BT

Thanks very much Russell. This is all what I wanted to ask at this stage.

APPENDIX 7

SKEWNESS AND KURTOSIS STATISTICS

APPENDIX 7

SKEWNESS AND KURTOSIS STATISTICS

APPENDIX 7 - Skewness and Kurtosis Statistics

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std.Error	Statistic	Std.Error
Behaviour of employees	78	-.326	.272	-.915	.538
Feeling safe in dealings	79	-.331	.271	-.787	.535
Courtesy of internal supplier	78	-.571	.272	-.070	.538
Competence of internal supplier	79	-.420	.271	-.578	.535
Keeping informed about timing	79	-.311	.271	-.693	.535
Willingness to help	79	-.339	.271	-.660	.535
Rapid response	78	-.327	.272	-.516	.538
Listening to problems	79	-.605	.271	-.118	.535
Quick answers and solutions	79	-.297	.271	-.567	.535
Emergency service deliveries	79	-.444	.271	-.128	.535
Welcoming complaints	79	-.462	.271	.188	.535
Provision of reliable service	79	-.206	.271	-.363	.535
Showing interest in solving problems	80	-.510	.269	-.590	.532
Service right the first time	79	-.170	.271	-.635	.535
Provision of accurate information	79	-.243	.271	-.740	.535
Telling the truth	79	-.378	.271	-.749	.535
When services are provided	79	-.450	.271	-.480	.535
Individual attention	79	-.309	.271	-.529	.535

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std.Error	Statistic	Std.Error
Best interest at heart	79	-.051	.271	-.628	.535
Understand specific needs	80	-.580	.269	-.210	.532
Concerned about problems	79	-.254	.271	-.665	.535
Insufficient insight	79	-.286	.271	-1.036	.535
Modern offices	79	.752	.271	-.405	.535
Employee appearance	80	.763	.269	-.394	.532
Tangibles are important	80	.468	.269	-.809	.532
Identification of needs	80	.039	.269	-.483	.532
Commitment to improvements	80	.172	.269	-.354	.532
Willingness to meet needs	80	.133	.269	-.745	.532
Always provides help	80	.001	.269	-.634	.532
Introduction of breakthrough solutions	80	.112	.269	-.456	.532
Services better than competition	80	-.362	.269	-.897	.532
Tailoring offerings to needs	80	-.548	.269	-.171	.532
Meeting unique specifications	80	-.119	.269	-.401	.532
Different services	79	-.071	.271	-.520	.535
Alternatives offered	79	-.028	.271	.252	.535
Assistance in solving problems	79	.009	.271	-.453	.535

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std.Error	Statistic	Std.Error
Specialised expertise	80	-.362	.269	-.387	.532
Comprehensive product knowledge	80	-.484	.269	-.313	.532
Using new technology	80	-.243	.269	-.020	.532
Price fair and competitive	80	-.265	.269	-.796	.532
More value for the price charged	80	-.362	.269	-.871	.532
TP and output competitiveness	80	-.373	.269	-.698	.532
Effort to reduce costs	80	-.049	.269	-1.008	.532
TPs easy to understand	80	.465	.269	-.765	.532
TP and reference price	79	-.604	.271	-.081	.535
Comparison of costs	78	-.356	.272	-.719	.538
TP major determinant of value	79	-.501	.271	-.778	.535
Process time consuming	79	.329	.271	-1.220	.535
SLAs	80	-.812	.269	-.639	.532
High risk of psychological discomfort	79	.356	.271	-1.170	.535
Risk of use high	79	.532	.271	-1.009	.535
Risk of potential problems	80	-.535	.269	-.802	.532
Warranty for internal service	79	.402	.271	-.914	.535
Relationships and TP	79	-.499	.271	-.623	.535
Service quality of internal supplier	79	-.331	.271	-.886	.535

N		Skewness		Kurtosis	
	Statistic	Statistic	Std.Error	Statistic	Std.Error
Total value versus total cost for internal services	80	-.066	.269	-1.024	.532
TP improves accumulated value	79	-.135	.271	-.795	.535
Always use of internal service	79	-.167	.271	-1.026	.535
Valid N (listwise)	73				

APPENDIX 8

COMMUNALITIES TABLE

Communalities

	Initial	Extraction
Feeling safe in dealings	1.000	.787
Courtesy of internal supplier	1.000	.814
Competence of internal supplier	1.000	.897
Keeping informed about timing	1.000	.802
Willingness to help	1.000	.811
Rapid response	1.000	.831
Listening to problems	1.000	.857
Quick answers and solutions	1.000	.804
Emergency service deliveries	1.000	.690
Welcoming complaints	1.000	.808
Provision of reliable service	1.000	.766
Showing interest in solving problems	1.000	.835
Service right the first time	1.000	.730
Provision of accurate information	1.000	.666
Telling the truth	1.000	.728
When services are provided	1.000	.860
Individual attention	1.000	.840
Best interest at heart	1.000	.642
Understand specific needs	1.000	.733
Concerned about problems	1.000	.765
Identification of needs	1.000	.764
Commitment to improvements	1.000	.842
Willingness to meet needs	1.000	.789
Always provides help	1.000	.864
Introduction of breakthrough solutions	1.000	.906
Services better than competition	1.000	.812
Tailoring offerings to needs	1.000	.769
Meeting unique specifications	1.000	.791

Different services	1.000	.848
Alternatives offered	1.000	.823
Assistance in solving problems	1.000	.797
Specialised expertise	1.000	.743
Comprehensive product knowledge	1.000	.816
Using new technology	1.000	.746
Price fair and competitive	1.000	.774
More value for the price charged	1.000	.813
TP and output competitiveness	1.000	.629
Effort to reduce costs	1.000	.624
TPs easy to understand	1.000	.780
High risk of psychological discomfort	1.000	.827
Risk of use high	1.000	.789
Risk of potential problems	1.000	.633
Relationships and TP	1.000	.707
Service quality of internal supplier	1.000	.845
Total value versus total cost for internal services	1.000	.866
TP improves accumulated value	1.000	.734
Always use of internal service	1.000	.670
Behaviour of employees	1.000	.824

Extraction Method: Principal Component Analysis.